

**Developing Sustainable Tourism in Hong Kong:
A Case Study of Tourism Cluster on Lantau Island**

TO, Tin Wei

A Thesis Submitted in Partial Fulfillment
of the Requirements for the Degree of
Master of Philosophy
in
Geography and Resource Management

©The Chinese University of Hong Kong
September 2007

The Chinese University of Hong Kong holds the copyright of this thesis. Any person(s) intending to use a part of whole of the materials in the thesis in a proposed publication must seek copyright from the Dean of the Graduate School.



Thesis Assessment Committee

Professor FUNG, Tung (Chair)

Professor MARAFA, Lawal M. (Thesis Supervisor)

Professor CHAU, Kwai Cheong (Committee Member)

Professor SAARINEN, Jarkko (External Examiner)

ABSTRACT

Following from the idea of sustainable development, sustainable tourism (ST) has increasingly become a popular field of research in the last decade. The Hong Kong government has paid more attention to this notion and increased investment in the tourism industry, alongside sustainable development policies. In order to gain benefits from sustainable development of tourism, Lantau Island is being advocated as a region for the clustering of various tourism and recreation products. However, the viability and impacts of clustering tourism resources on Lantau Island as one strategy for ST development is still being questioned.

Taking Lantau Island as a case example, this research intended to study and analyze ST strategies and investigate to what extent does tourism clustering aids ST on Lantau Island and Hong Kong. To this end, the performance of a tourism cluster on Lantau Island in the context of ST was investigated by both qualitative and quantitative methodologies. Initially a comprehensive assessment was carried out using the Tourism Rapid Assessment (TRA) methodology. In addition to this, SWOT analysis with emphasis on (1) Resources and attractions, (2) Capital, and (3) Policies and planning on Lantau Island was adopted to investigate the potentials and limitations of Lantau Island for ST development. Following from this, in-depth interviews with twenty-nine stakeholders was undertaken to identify their opinion and perception on ST development and tourism clustering on Lantau Island.

Ngong Ping tourism cluster as a cultural destination with additional tourism resources, was chosen for further study and evaluation in four major aspects: (1) Protection of the destination's resources attractions; (2) Visitors satisfaction with their experience; (3) Residents assessment on tourism development; and (4) Return on investment. At the Ngong Ping tourism cluster, a total of 1,050 tourists were randomly

selected and interviewed. Information sought included perception and satisfaction on their visits to Ngong Ping, their opinion on tourism clustering, understanding of ST and other demographic information to facilitate understanding. Furthermore, semi-structured interviews were conducted with community members at the destination to seek further information.

Results generated from the opinions of stakeholders show that there are at least seven potentials and six limitations of Lantau Island for ST development. Potentials include the provision of diversified tourism resources and facilities with environmental conservation policies. Limitations, on the other hand, include the absence of vision and holistic long term planning for ST development. In the case of Ngong Ping tourism cluster, the natural environment is considered to be gradually deteriorating. Majority of the tourists interviewed were satisfied with their visit in the cluster, while some local residents were not happy with the adverse impacts brought by the development.

From the results of the study, it is recommended that vision and principles for ST development with emphasis on environmental conservation should be primarily established by the involvement of all stakeholders. Tourism clustering with the promotion of Lantau Island as a whole should also be implemented to enhance ST development. Given the currency of the need for ST development as seen from the study, further research could be undertaken to investigate the connection and interaction between various clusters, and among major stakeholders in the context of ST development in Hong Kong.

Keywords: Hong Kong, Lantau Island, sustainable tourism, SWOT analysis, tourism cluster, tourism development

論文摘要

隨著「可持續發展」(Sustainable Development) 概念的出現，「可持續旅遊」(Sustainable Tourism) 這概念亦隨之成為一熱門研究領域。近年，香港政府注意到這概念的重要性，增加了對旅遊業的投資。為了從可持續旅遊發展中獲益，其中一項建議是將大嶼山發展成旅遊及康樂中心（旅遊集群 Tourism cluster），但其可行性和影響仍是一大疑問。

本研究旨在探討旅遊集群是否有助可持續旅遊在香港的發展，以大嶼山及昂坪為例，分析及建議出相應的發展策略。為此，透過定性和定量的調查方法，調查大嶼山旅遊集群，在可持續旅遊概念方面的表現。首先，本研究利用旅遊業快速評估方法 (Tourism Rapid Assessment) 進行綜合性評估；並以 (1) 資源和景點、(2) 資本、及 (3) 政策與規劃為重點，利用 SWOT 分析法 (SWOT analysis) 調查大嶼山發展可持續旅遊的潛力和限制。此外，作者與 29 位可持續旅遊發展的持份者作深入訪問，了解他們對可持續旅遊及在大嶼山發展旅遊集群的意見和看法。

為了進一步探討大嶼山的旅遊集群如何配合可持續旅遊的發展，具有本土文化特色的昂坪旅遊集群被選為主要研究範圍，並透過四個主要方面作研究和評估：(1) 目的地環境資源的保護；(2) 遊客對旅程的滿意情況；(3) 當地居民對旅遊發展的評估；及 (4) 旅遊發展對投資者的回報。在昂坪旅遊集群中，共有 1,050 位遊客接受訪問，收集得來的資料包括遊客對是次旅程的意見和滿意情況、他們對旅遊集群的看法、對「可持續旅遊」概念的認識、及遊客的基本資料以助分析。另外，本研究亦採用了半結構性訪問方式，訪問了昂坪當地居民以取得更多相關資料作分析。

從持份者的意見中，可綜合出最少七項在大嶼山發展可持續旅遊的潛力和六項限制。潛力包括大嶼山能提供各種各樣的旅遊資源和設施，配合政府在大嶼山實施的自然保護政策；而限制則包括香港正缺乏發展可持續旅遊的遠景，及一套全面的長遠計劃。在昂坪集群的例子中，自然環境已被認為逐漸受破壞；雖然多數受訪遊客對其旅程也表示滿意，但是，受訪的當地居民卻對旅遊發展對環境產生的破壞表示不滿。

綜合本研究結果，作者建議若要在香港發展可持續旅遊，所有持份者必須參與，並以保護環境為首要考慮條件，共同確立目標、方向及原則。而將旅遊資源集中作旅遊集群發展，及推廣整個大嶼山作旅遊目的地，也是有助可持續旅遊發展的一些措施。由於可持續旅遊發展將越趨重要，往後的研究可探討在香港發展可持續旅遊時，不同旅遊集群及主要持份者的相互關係和影響。

關鍵字：香港、大嶼山、可持續旅遊、SWOT分析法、旅遊集群、旅遊發展

ACKNOWLEDGEMENT

This study is supervised by Professor Lawal M. Marafa, of the Department of Geography and Resource Management. I would like to express my deepest gratitude and sincere thanks to Prof. Marafa for his patient guidance and kind support in this study in spite of his busy works. Without his enduring supervision and entire support, the research and thesis writing cannot be completed smoothly. All other teachings and assistances from the Professors and staffs of the Department of Geography and Resource Management are highly appreciated as well.

I would like to show gratitude to the stakeholders who have provided valuable time and opinions in contributing to my investigation and the completion of this study.

Besides, I should express my sincere thanks to a group of student helpers who contributed their time and efforts in assisting the conduction of interviews in Ngong Ping. With the support and kindly assistance from the helpers, substantial amount of data could therefore be collected within short period of time. There are more than 10 helpers while gratitude is particularly expressed to Mr Deshawn Wong Siu Wa, Mr Joseph Lam Tsz Chun, Miss Wong Shan Shan and Miss Chan Hoi Ying.

I would also like to thank my friends and fellows in encouraging and supporting me in the process of studying. I am delighted and impressed to learn and work with them for their considerate and pleasant personality. Their constructive opinions and advices are often inspiring and helpful for my study. Appreciation is especially shown to Mr Yeung Wan On, Miss Carmen Ng Kar Man, and Miss Candy Wong Ngai Sze.

Special thanks are sent to a group of brothers and sisters of The Hung Hom Christian Church. Their caring and continuous prayers provide me with confidence and spiritual support in my study. Some of them include Mr Joshua Ng Siu Pun, Mr Jeffrey Lee Hsien Tsung, and many others who pray hardly for me in my study.

Moreover, I should express my earnest gratitude to my family members for their endless love, unreserved care and unlimited tolerance throughout my life. Gratitude should not be left for two of my best friends, Miss Candy Au Pui Man and Miss Florence Lam Tsz Yan, for their unfailing support with encouraging sharing during both the ups and downs of my study and my life.

Last but not least, I must thank and praise my dearest God, Jesus Christ, for his love and inclusive supply in my life with a happy family and groups of friends and mentors who act as the angels of my life. May all the glory and praise be to the Almighty God.

TABLE OF CONTENTS

	<i>Page</i>
ABSTRACT	i
論文摘要	iii
ACKNOWLEDGEMENT	v
TABLE OF CONTENTS	vii
LIST OF ABBREVIATIONS	xii
LIST OF TABLES	xiv
LIST OF FIGURES	xvi
LIST OF APPENDICES	xviii
 CHAPTER 1 INTRODUCTION	 1
1.1 Introduction and background	1
1.1.1 Tourism in Hong Kong	1
1.1.2 Sustainable tourism development in the Hong Kong context	5
1.1.3 Tourism cluster	6
1.2 Conceptual framework	8
1.3 Research objectives	13
1.4 Research significance	15
1.4 Organization of thesis	17
 CHAPTER 2 LITERATURE REVIEW	 20
2.1 Concept of Sustainable Tourism	20
2.1.1 Development and definition of Sustainable Tourism	20
2.1.2 Principles of Sustainable Tourism	24
2.1.3 Methods of Sustainable Tourism assessment	28
2.1.3.1 Indicators of Sustainable Tourism	28
2.1.3.2 Carrying Capacity	31
2.1.3.3 Other technical measures for Sustainable Tourism assessment	31
2.1.3.4 Perception study in Sustainable Tourism assessment	32
2.2 Clustering of tourism resources	34
2.2.1 Tourism cluster	36
2.2.1.1 Advantages of the formation of tourism cluster	38
2.3 The role of clustering of tourism resource in Sustainable Tourism development	39
2.4 Situation of Hong Kong	41
2.4.1 Trend and implementation of Sustainable Tourism in Hong Kong	41
	vii

2.4.2	Clustering of tourism resource in Hong Kong	44
2.4.3	Tourism study conducted on Lantau Island	47
CHAPTER 3	STUDY AREA	49
3.1	Inventory of Lantau Island	51
3.1.1	Resources and attractions	51
3.1.2	Capital	58
3.1.3	Policies and planning	59
3.2	The Ngong Ping tourism cluster	62
3.2.1	Tourist attractions	64
3.2.1.1	Po Lin Monastery	65
3.2.1.2	The Big Buddha	67
3.2.1.3	Ngong Ping 360	68
3.2.1.4	Wisdom Path	71
CHAPTER 4	METHODOLOGY	73
4.1	Tourism Rapid Assessment (TRA)	73
4.2	Hierarchical structure of tourism resources inventory of Lantau Island	75
4.3	Interviews and questionnaire survey	78
4.3.1	Structured interview with stakeholders	79
4.3.1.1	Sample selection	79
4.3.1.2	Questionnaire design	79
4.3.1.2.1	SWOT analysis	80
4.3.1.2.2	In-depth open-ended interview	81
4.3.1.3	Data analysis	82
4.3.1.3.1	Informal content analysis	82
4.3.2	Structured questionnaire survey with tourists	83
4.3.2.1	Sample selection	83
4.3.2.2	Questionnaire design	83
4.3.2.3	Data analysis	84
4.3.3	Structured interviews with local community	85
4.3.3.1	Sample selection	85
4.3.3.2	Questionnaire design	86
4.3.3.3	Data analysis	86
4.4	Perception of stakeholders as the basis for assessment	87

CHAPTER 5	UNDERSTANDING LANTAU ISLAND AND TOURISM CLUSTER FROM STAKEHOLDERS' PERSPECTIVE	90
5.1	Results of SWOT analysis from stakeholders' perspective	90
5.1.1	Strengths	95
5.1.2	Weaknesses	96
5.1.3	Opportunities	98
5.1.4	Threats	99
5.2	Understanding Sustainable Tourism and tourism cluster by stakeholders	100
5.2.1	General attitudes about "Sustainable Tourism"	101
5.2.2	Tourism policies and development of Hong Kong and Lantau Island	102
5.2.3	Tourism cluster on Lantau Island	104
5.2.4	Performance of Ngong Ping tourism cluster in the context of Sustainable Tourism	106
CHAPTER 6	ATTRACTIONS AND PERCEPTION OF NGONG PING TOURISM CLUSTER	110
6.1	Results of questionnaire survey with tourists	110
6.2	Perception and satisfaction of tourists in Ngong Ping tourism cluster	113
6.3	Understanding Sustainable Tourism	119
6.3.1	Performance of tourism cluster in the context of Sustainable Tourism	122
6.3.1.1	Environmental aspect	123
6.3.1.2	Socio-cultural aspect	125
6.3.1.3	Economic aspect	126
6.4	Investigation from the local community perspective	127
6.4.1	Impacts of Ngong Ping tourism cluster in the context of Sustainable Tourism	128
6.4.1.1	Environmental impacts	129
6.4.1.2	Socio-cultural impacts	132
6.4.1.3	Economic impacts	134
CHAPTER 7	DISCUSSIONS – DEVELOPING SUSTAINABLE TOURISM ON LANTAU ISLAND	135
7.1	Review of tourism policies in Hong Kong and Lantau Island	135
7.2	Interests of respondents	140
7.3	Meaning and Conceptualization of Sustainable Tourism	142
7.4	Potentials and limitations of Lantau Island for Sustainable Tourism development	144

7.4.1	Potentials of Lantau Island for Sustainable Tourism development	145
7.4.1.1	Natural and cultural resources with diversified attractions	145
7.4.1.2	Improved transport networks	146
7.4.1.3	Availability of trails	146
7.4.1.4	Distinct location: rural destination for leisure	147
7.4.1.5	Environmental initiative of The Ngong Ping 360 Project	147
7.4.1.6	Nature Conservation Policy	147
7.4.1.7	Benefits of tourism clustering for sustainability	148
7.4.2	Limitations of Lantau Island for Sustainable Tourism development	149
7.4.2.1	Lack of long term vision and holistic planning	149
7.4.2.2	Absence of guidelines and regulation for the implementation of Sustainable Tourism practices	150
7.4.2.3	Lack of awareness and promotion of Sustainable Tourism	151
7.4.2.4	Lack of local community participation	152
7.4.2.5	Economic oriented development with many purposely-built artificial attractions	153
7.4.2.6	Did not utilize the benefits of tourism clustering	153
7.5	Performance of tourism cluster in Ngong Ping in the context of Sustainable Tourism	155
7.5.1	Protection of the destination's resources attractions	155
7.5.2	Visitor satisfaction with their experience	156
7.5.3	Residents assessment on tourism development	157
7.5.4	Return on investment	158
CHAPTER 8 CONCLUSION		162
8.1	Summary of findings	162
8.1.1	Concept of Sustainable Tourism	162
8.1.2	SWOT of Lantau Island	163
8.1.3	Performance of Ngong Ping tourism cluster in the context of Sustainable Tourism	165
8.2	Strategy and recommendations for Sustainable Tourism Development	166
8.2.1	Establishment of vision and principles for Sustainable Tourism development with holistic planning	167
8.2.1.1	Reach consensus, set clear vision with all-inclusive planning	167
8.2.1.2	Conservation of natural environment as the primary principle	170
8.2.1.3	Involvement of all stakeholders through consultation	171

8.2.1.4	Using research and baseline information	172
8.2.1.5	Sustainable Tourism implementation and monitoring	174
8.2.2	Promotion of tourism clustering	175
8.2.2.1	Enhance the attractiveness of destinations	175
8.2.2.2	Enhancing sustainability by tourism clustering	175
8.2.3	Utilization of existing resources and encouraging local participation	176
8.2.3.1	Make use of existing assets instead of constructing artificial attractions	176
8.2.3.2	Encourage more local communities' participation	177
8.2.4	Education, training and provision of sufficient supporting facilities	178
8.2.4.1	Increase awareness on the importance of Sustainable Tourism development	178
8.2.4.2	Provision of tour guides and staff training	179
8.2.4.3	Provision of sufficient supporting infrastructures and facilities	180
8.3	Limitations of the study	181
8.4	Recommendations for further studies	183
BIBLIOGRAPHY		185
APPENDICES		203

LIST OF ABBREVIATIONS

A	Academics
AHP	Analytic Hierarchy Process
B	Businessman
CBA	Cost-benefit Analysis
CC	Carrying Capacity
CST	Coalition on Sustainable Tourism
CVM	Contingent Valuation Method
DSR	Development Strategy Review
ESDS	Environmentally Sustainable Development Strategy for Hong Kong's Travel and Tourism Industry
G	Government
HKSAR	Hong Kong Special Administrative Region
HKTA	Hong Kong Tourism Association
HKTB	Hong Kong Tourism Board
HPM	Hedonic Pricing Method
IISD	International Institute for Sustainable Development
MTRC	Mass Transit Railway Corporation
N	NGO/NPO

NGO/NPO	Non-government or Non-profit making Organizations
RDS	Recommended Development Strategy
SAR	Hong Kong Special Administrative Region
SARS	Severe Acute Respiratory Syndrome
SD	Sustainable Development
SPSS	Statistical Package for the Social Sciences
SSSI	Site of Special Scientific Interest
ST	Sustainable Tourism
STTF	Sustainable Tourism Task Force
SUSDEV 21	Sustainable Development for the 21st Century in Hong Kong
SWNT	Southwest New Territories
SWOT	Strength, Weakness, Opportunity, Threat
TCM	Travel Cost Method
TRA	Tourism Rapid Assessment
UNWTO	World Tourism Organization of the United Nations
VISTOUR	The Visitor and Tourism Study for Hong Kong

LIST OF TABLES

	<i>Page</i>
Table 2.1	Fundamental indicators of ST (UNWTO, 1997) 30
Table 2.2	Proposed Tourism Clusters in Hong Kong 44
Table 3.1	Natural resources on Lantau Island 51
Table 3.2	Cultural resources on Lantau Island 54
Table 3.3	Major attractions on Lantau Island 56
Table 4.1	Summary of methodologies 74
Table 5.1a	Strengths of Lantau Island for ST development 91
Table 5.1b	Weaknesses of Lantau Island for ST development 92
Table 5.1c	Opportunities of Lantau Island for ST development 93
Table 5.1d	Threats of Lantau Island for ST development 94
Table 5.2	Interviewees' understanding of ST 101
Table 5.3	Benefits and limitations of tourism clustering 105
Table 6.1	Demographic profile of tourists interviewed in Ngong Ping 110
Table 6.2	Attractiveness of Ngong Ping 111
Table 6.3	Attractiveness of Ngong Ping before and after opening of Cable Car 112
Table 6.4	Mean values of level of satisfactions before and after the opening of Ngong Ping Cable Car 114
Table 6.5	Attractions that tourists like most 115
Table 6.6	Perception on tourism clustering in Ngong Ping 117
Table 6.7	Level of satisfaction with the experience in Ngong Ping 118
Table 6.8a	Percentage of respondents understanding ST (Nationality) 120

Table 6.8b	Percentage of respondents understanding ST (Education level)	121
Table 6.9	Respondents' understanding of ST	122
Table 6.10	Capability of attractions to provide long term economic benefits	127
Table 6.11	Demographic profile of interviewees (local community)	129
Table 7.1	Major Tourism Projects	138
Table 7.2	Classification of respondents	140
Table 7.3	Economic impacts of tourism development in Ngong Ping	161

LIST OF FIGURES

	<i>Page</i>
Figure 1.1	Total visitors arrival trend in Hong Kong (1996-2006) 3
Figure 1.2	Fundamental factions and key stakeholders of ST 9
Figure 1.3	Determinants of destination competitiveness 10
Figure 1.4	Conceptual framework of the study 11
Figure 1.5	Processes of investigation 13
Figure 2.1	Criteria for ideal indicators of ST 29
Figure 2.2	Interrelationship between cluster, competitiveness and sustainability 40
Figure 2.3	Tourism clusters on Lantau Island (proposed in the SWNT Development Strategy Review) 46
Figure 3.1	Map of Lantau Island 50
Figure 3.2	Biodiversity resources on Lantau Island 52
Figure 3.3	Selected major attractions on Lantau Island 57
Figure 3.4	Major suggestions proposed in the Concept Plan for Lantau Island 61
Figure 3.5	Map of Ngong Ping area 63
Figure 3.6	Location of attractions in Ngong Ping 65
Figure 3.7	Po Lin Monastery 66
Figure 3.8	The Big Buddha 67
Figure 3.9	Tourist visit to Po Lin Monastery/ Big Buddha in 2001-2005 68
Figure 3.10	Ngong Ping Skyrail 69
Figure 3.11	Ngong Ping Village 70
Figure 3.12	Schematic map of Ngong Ping 360 Project 71

Figure 3.13	Wisdom Path	72
Figure 4.1	Hierarchical structure of tourism resources on Lantau Island	77
Figure 5.1	Ngong Ping Stream with stagnant pool	107
Figure 5.2	Ngong Ping Stream polluted by the construction of Ngong Ping 360 Project	108
Figure 6.1	Attractiveness of Ngong Ping before and after opening of Cable Car	112
Figure 6.2	Visitors' level of satisfaction for attractions in Ngong Ping	114
Figure 6.3	Factors of satisfaction with attractions in Ngong Ping	116
Figure 6.4	Factors of dissatisfaction with attractions in Ngong Ping	116
Figure 6.5a	Percentage of respondents understanding ST (by nationality)	120
Figure 6.5b	Percentage of respondents understanding ST (by education level)	120
Figure 6.6a	Visitors' responses on the adoption of environmental measures (examples)	123
Figure 6.6b	Visitors' responses on the adoption of environmental measures (sufficiency)	124
Figure 6.7	Environmental protection measures that should be adopted	124
Figure 6.8	Contribution of attractions to the conservation of local culture	126
Figure 6.9a	Ngong Ping before 2001	131
Figure 6.9b	Ngong Ping in 2004	131
Figure 6.9c	Ngong Ping in 2006	131
Figure 6.10a	Ngong Ping before 1995	131
Figure 6.10b	Ngong Ping in 2007	131
Figure 8.1	Steps of the integrated and strategic planning for ST development	170
Figure 8.2	Baseline information required for ST development planning	173

LIST OF APPENDICES

	<i>Page</i>
Appendix 1	Sustainable tourism indicators suggested by Vellas (2004) 203
Appendix 2	Major recorded development on Lantau Island 206
Appendix 3	Natural resources on Lantau Island 207
Appendix 4	Cultural resources on Lantau Island 209
Appendix 5	Locations of trails on Lantau Island 210
Appendix 6	Letter of introduction for stakeholders 216
Appendix 7	Questionnaire for stakeholders 217
Appendix 8	Details of SWOT 223
Appendix 9a	Questionnaire for tourists in Ngong Ping (English version) 237
Appendix 9b	Questionnaire for tourists in Ngong Ping (Chinese version) 241
Appendix 10a	Questionnaire for local community in Ngong Ping (English version) 245
Appendix 10b	Questionnaire for local community in Ngong Ping (Chinese version) 248
Appendix 11	Basic site-specific information required 251

CHAPTER 1 INTRODUCTION

1.1 Introduction and background

Since the late 1980s, the concept of sustainability has emerged in various fields to look for better management of resources that could enhance the sustainable development of industries. Following the idea of sustainable development, sustainable tourism has become one of the increasingly popular fields of research in recent decades. At the same time, the government of Hong Kong Special Administrative Region (HKSAR) is increasingly paying attention to the field as it impacts on the tourism industry and the growth and development of the HKSAR as a whole (HKSAR, 1999b). In order to achieve the goals and benefit from sustainable development of tourism, various policies have been suggested (HKPD, 1998; HKPD, 2001a). The formation of tourism cluster is thought to be one of such effective ways (HKPD, 2002b; Lee, 2004; TC, 2006). Locally, there is the advocacy of developing Lantau Island of Hong Kong as a region for the clustering of various tourism and recreation activities. The viability and impact of cluster formation in sustainable tourism as a strategy for development of alternative tourism in Hong Kong is crucial and deserves further research.

1.1.1 *Tourism in Hong Kong*

The tourism industry in Hong Kong is one of the most important industries of the local economy. For many years, Hong Kong has experienced a long “honeymoon” period of tourism growth, which was based on the solid foundation of economic development that had provided disposable income and changes in consumer behavior (Hall, 1994). Since 1997, a series of events happened in the Asia Pacific Region

¹(APR) that brought an end to the long peaceful period of tourism growth in some countries including Hong Kong.

On 1st July 1997, there was a significant political event which involved the handover of the Hong Kong territory to Mainland China. Coincidentally, the Thai Government cut the link of Bath (the Thai currency) to US dollar on 2nd July 1997 which resulted in the financial crisis in the APR. In addition, there was the outbreak of the bird flu in December 1997 that scared away many visitors. As recorded in January 1998, the monthly visitor arrivals plunged on an average of 25% (Granites, 1998). In 1997, the total visitors' arrival was about 11% less than that of 1996 (HKSAR, 1997). All these events caused adverse effects to the tourism industry in Hong Kong following the handover in 1997.

In view of the above, the Hong Kong Tourism Association (HKTA)² introduced series of functions and new attractions to lure tourists from all over the world. "We are Hong Kong – City of Life" and more than 120 events during the millennium promotion period were promoted overseas in 1999 (HKSAR, 1999a). New facilities like Tin Shui Wai Wetland Park, the cable car system (Ngong Ping 360) on Lantau Island and the Hong Kong Disneyland were planned in 1999. Some other activities in cooperation with the business communities such as "CLP Lights up Hong Kong" and "The Cathay Pacific International Chinese New Year Parade" were held in 2001 and 2002 to enhance tourism activities (HKSAR, 2001).

All the new attractions and activities seemed to be effective in improving the situation in the following years. As can be seen in Figure 1.1, the number of visitors

¹ Leading tourist destination regions in the APR include Hong Kong, Singapore, Thailand, Japan, Australia, and South Korea.

² HKTA was renamed as Hong Kong Tourism Board (HKTb) in 2001.

arrival started to improve since 1999 with an increase of about 20% in 2002 (16.57 million) compared with 2001 (13.73 million) (HKTb, 2007). However, another shock to the industry came in March 2003, with the outbreak of the SARS (Severe Acute Respiratory Syndrome) virus which scared visitors from all over the world. The outbreak led to the decrease of total visitor arrival from 16.57 million to 15.54 million, accounting to a decrease of 6.2% (HKTb, 2007).



Figure 1.1 Total visitors arrival trend in Hong Kong (1996-2006)
Data source: HKTb, 2007

To sustain long-term growth and reinforce Hong Kong’s destination image, the Hong Kong Tourism Board (HKTb) launched a “Major Global Tourism Revival Campaign” in late June 2003 (HKSAR, 2003). “The Hong Kong Shopping Festival”, “Hong Kong International Musical Fireworks Competition”, “Hong Kong Winter Festival”, etc. were some of the activities launched in 2003 to boost the economy and improve the situation of the tourism industry. Together with the introduction of the “Individual Visitor Scheme” targeted at visitors from mainland China since July 2003, the amount of tourists visiting Hong Kong has increased gradually. It was reported that there was about 40% increase in visitors’ arrival and 25% increase in the total

tourism expenditure in 2004 (HKTb, 2005a).

To ensure the continuous visits to Hong Kong by tourists and the better utilization of tourism resources, additional attractions and strategic policies were considered. In a renewed vigor of tourism policy, the use of the abundant natural and cultural resources in the territory was considered to boost tourism development. To this effect, new strategies and planning were advocated by various groups as well as the government in recent years (GLA, 1998; HKPD, 2001a; HKPD, 2004; Williams, 2005; DAB, 2006). The establishment of the international wetland park in Tin Shui Wai in 2006 is one of such policies promoting ecotourism, a kind of alternative tourism in Hong Kong.

Within this context, the Concept Plan regarding the developments on Lantau Island was initiated and opened for discussions among different stakeholders. Lantau Island, as the biggest island of Hong Kong, possesses important infrastructures like the international airport, and substantial amount of natural and cultural heritages that are valuable for the purpose of conservation as well as development. The Concept Plan for Lantau Island (HKPD, 2004) is designed for a sustainable development of Lantau Island with the concentration of various tourist activities and economic infrastructures as a major component. It is proposed that this strategic plan may benefit the natural, social, cultural as well as the economic aspects of Lantau Island and the whole Hong Kong. The viability and effectiveness of ideas and planning suggested in the Concept Plan are still under consultation and assessment. The plan however, noted that Lantau Island does provide invaluable resources, environment and opportunities for tourism development. Then, how to manage and make good use of these resources so that tourism activities can benefit the region in all aspects for generations?

1.1.2 Sustainable tourism development in the Hong Kong context

Sustainable tourism (ST) has become one of the topical issues in recent decades. It was suggested in the late 1980s and defined as development that *“meets the needs of present tourists and host regions while protecting and enhancing opportunities for the future. It is envisaged as leading to management of all resources in such a way that economic, social and aesthetic needs can be fulfilled while maintaining cultural integrity, essential ecological processes, biological diversity and life support system”* (UNWTO website, 2004). Given the wide application of such a definition, it can be applied to all forms of tourism in all types of destinations, including mass tourism and various niche tourism segments (UNWTO, 2004). It is a kind of ideal tourism development searching for the sake of all relevant stakeholders in all aspects. Given that this is the case, can this be applicable to Hong Kong?

With increasing recognition on the importance of environmental, social and cultural components of a tourist destination, members of the tourism industry in Hong Kong have expressed the need for ST development. The concept of ST development (sustainable development in tourism industry) was formally initially discussed in Hong Kong in November 1997. The Environmentally Sustainable Development Strategy (ESDS) for Hong Kong's Travel and Tourism Industry was prepared thereafter. The strategy was made to help steer future growth of tourism industry on a path towards environmentally sustainable development (HKTA, 2000). It is meant to encourage the industry to enhance environmental quality while fulfilling economic requirements without compromising opportunities for future generations. Some practical recommendations were suggested. However, with the absence of regulations and monitoring system, the achievements and effectiveness of ESDS are still being questioned. The question then is, how should ST be practiced for the sake of the

environment, community as well as the local economy?

As the concept of ST development can be applicable to all types of tourism development, the potential and weakness of a destination for ST development should first be examined. Lantau Island, with heated discussion recently about its future development, is one of the popular tourism destinations in Hong Kong. As a proposed destination for ST development, it is essential to identify the opportunities and limitations of Lantau Island for ST development so that policies and planning could be implemented effectively.

Recently, more attention has been paid to the clustering of tourism activities on Lantau Island. On one hand, some (CA, 2005; Ho, 2005) argue that the addition and clustering of various tourist activities on Lantau Island will bring negative impacts to the island. On the other hand, some (Jonker, 2004; Lee, 2004) have suggested that the addition and clustering of tourism resources and attractions in an area can be an approach towards ST development. In reality, can the clustering of tourism activities on Lantau Island make contributions to tourism sustainability?

1.1.3 Tourism cluster

Cluster is a concept proposed by Porter (1990), who defines clusters as “*geographically proximate group of interconnected companies and associated institutions in a particular field, linked by commonalities and complementarities*” (Porter, 1990). For tourism cluster, it is based on the idea that all players within the tourism destination must work together to enhance the destination’s competitiveness (Hawkins, 2004a). It was believed that the inter-play of relevant stakeholders within the tourism destination can increase the sustainability of tourism activities. Whether or not this will be true in Hong Kong is yet to be established.

From a territorial perspective, Lantau Island as a whole has become a cluster of tourism activities. Various kinds of tourism attractions include Tai O fishing village, The Hong Kong Disneyland and Inspiration Lake and Recreation Center, The Big Buddha and Po Lin Monastery, Wisdom Path, The Ngong Ping 360 project, etc (Refer to Figure 3.3 in Chapter 3). In addition, several tourism sub-clusters (Refer to Figure 2.3 in Chapter 2) can also be discovered.

Among the various tourism clusters on Lantau Island, the concentration of attractions in Ngong Ping is one of the outstanding clusters. Ngong Ping tourism cluster as a destination comprises not only natural beauty, but also cultural features with the addition of economic activities recently. The presence of The Big Buddha and Po Lin Monastery, together with many small monasteries and temples around the area, has generated a spiritual atmosphere with cultural characteristic. The opening of Wisdom Path in 2005 can further enhance the spiritual experiences of tourists. In addition, the operation of the Ngong Ping 360 project in September 2006 provides an excellent opportunity for a panoramic appreciation of the island. In that case, is the concentration of these tourism resources in Ngong Ping attracting people and performing in the context of ST? Can it reinforce the strengths and lessen the weaknesses of Lantau Island for ST development?

With evaluation of the potentials and limitations of Lantau Island, as well as the performance of Ngong Ping tourism cluster in the context of ST, strategies for implementation and development of ST can be formulated.

1.2 Conceptual framework

Following from the concept of sustainable development, the concept of ST has been discussed for decades since 1980s with growing concern on the adverse impacts of tourism activities on the environment. Theoretical understandings of the concept have been identified from substantial amount of literature (Bramwell and Lane, 1993; Butler, 1993; McMinn, 1997; McCool, 1999; Hardy *et al.*, 2002; Sharpley, 2002; Liu, 2003). It is generally accepted that ST is a process that seeks to accommodate both present and future needs of the tourism industry, community, government and natural environment in enhancing visitors' experiences and quality of life of the locals (Kaae, 2000; Carter and Fabricius, 2006; TTC, 2007). Based on the concept of sustainable development, three major dimensions of ST are often highlighted: environmental aspect, socio-cultural aspect, and economic aspect.

In addition to providing satisfactory experiences for visitors, conserving environment and ecological diversity, conserving local culture and being socially desirable, and sustaining economic development for generations form the core in the process of ST development. Furthermore, this is an issue concerning the long term planning and management of tourism resources at destinations to satisfy the needs of various stakeholders. Hence, the engagement and interactions between diverse groups of stakeholders are essential in contributing to ST development. In order to understand such complex concept, Figure 1.2 shows the fundamental fractions of ST and the linkages between key stakeholders in ST. Public sector stakeholders like government planners, tourism resources managers, etc., tourism businessmen, host communities, and tourists were identified as major stakeholders in ST development. It is believed that the involvement and perceptions of stakeholders on tourism development in the destination are influential in affecting the ST development process (McDonald, 2006).

Hence, the opinions of stakeholders on ST development in the destination should not be neglected, and will be collected in this research for investigation.

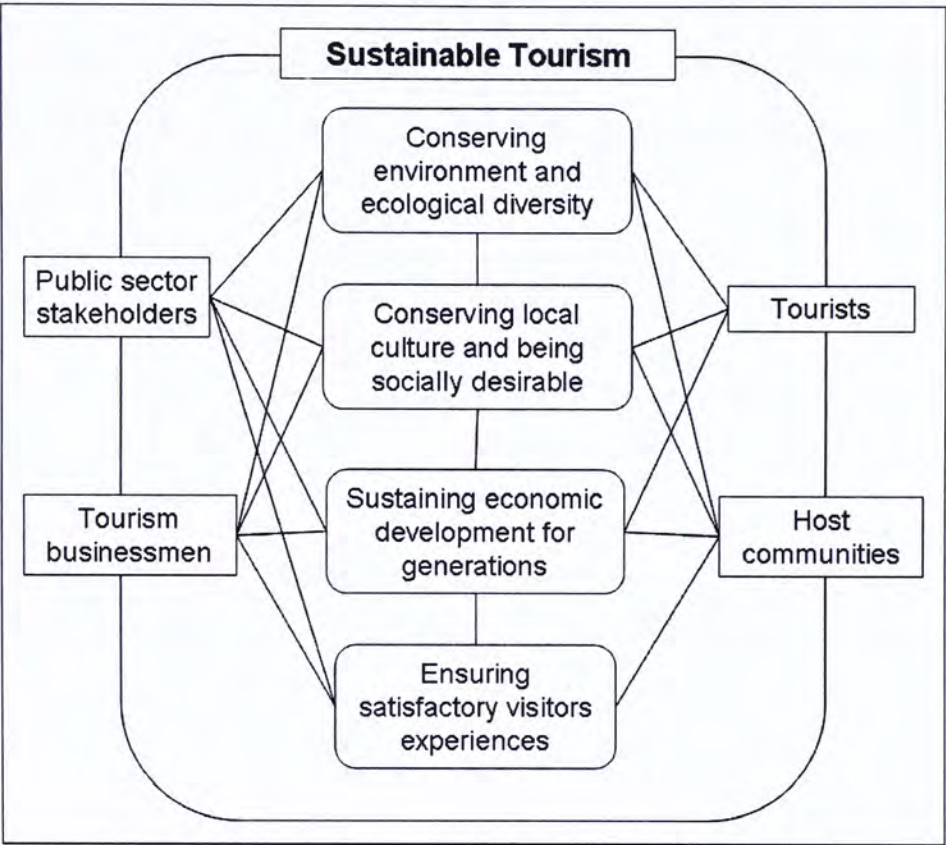


Figure 1.2 Fundamental factions and key stakeholders of ST

Data Source: Bramwell and Lane, 1993; Butler, 1993; McMin, 1997; McCool, 1999; Hardy et al., 2002; Sharpley, 2002; Liu, 2003; McDonald, 2006

On the other hand, cluster, a concept proposed by Porter (1990) and was also applied in the tourism field, indicating the concentration and connection between key players of tourism industry may contribute to the destination competitiveness, and its sustainability (Porter, 1990). Crouch and Ritchie (2000) stated that competitiveness and sustainability are closely related. To help determining the destination competitiveness, four major determinants were proposed by Porter (1990) using a diamond framework. They are (1) factor condition; (2) demand condition; (3) related and supportive industries, and (4) industry structure, strategy and rivalry (Figure 1.3). When applying the diamond framework in tourism industry, “factor condition” can be

considered as tourism resources. “Demand condition” refers to the tourism market. “Related and supporting industries” are the tourism allies, while “industry structure, strategy and rivalry” refers to the tourism industry itself (Fabricius, 2006). Whether the diamond framework can apply to the case of Hong Kong and Lantau Island, and reflect the competitiveness and sustainability of tourism destination will have to be identified.

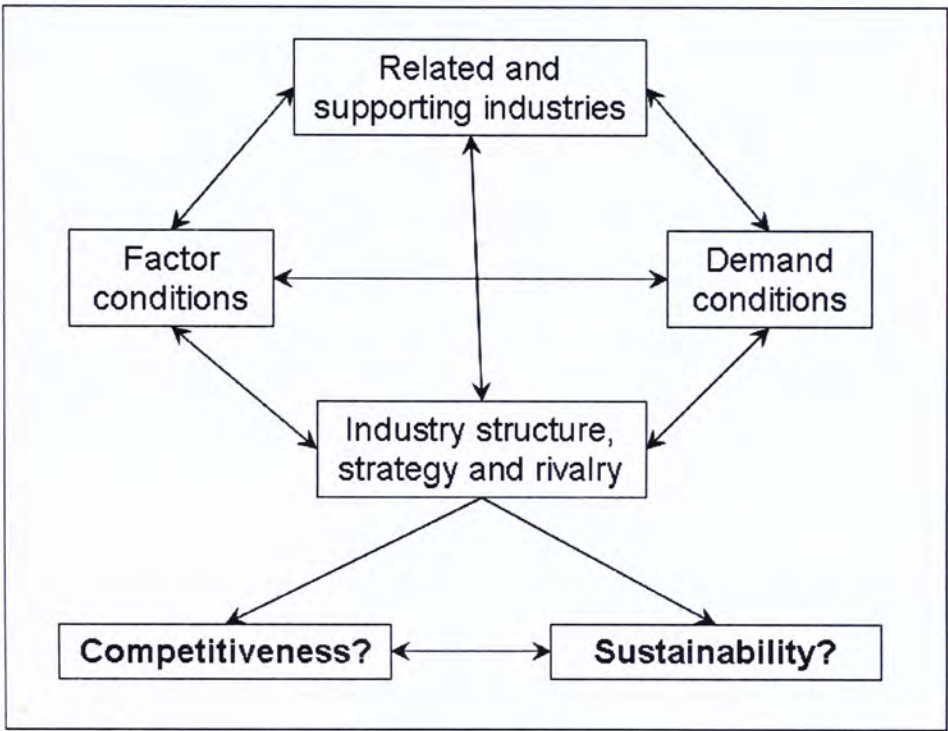


Figure 1.3 Determinants of destination competitiveness
Source: Fabricius, 2006

Figure 1.4 shows the overall conceptual framework of the study. In this case, the fundamental fraction of ST development will be the basis upon which Lantau Island tourism cluster will be investigated.

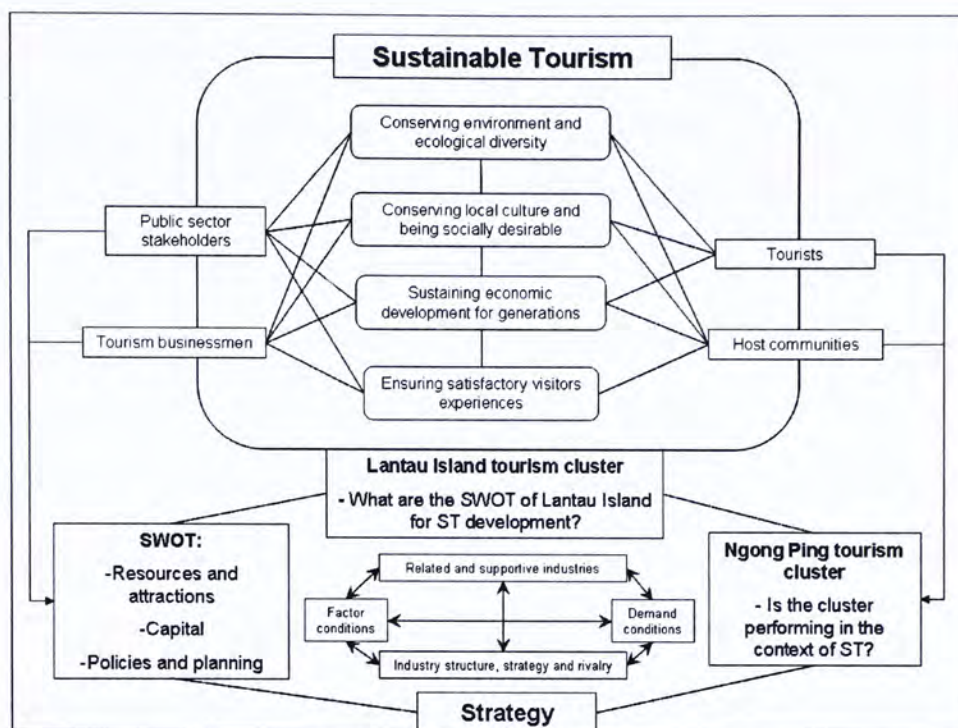


Figure 1.4 Conceptual Framework of the study

Following from the foregoing, “Sustainable tourism”, a growing important aspect of the tourism industry should be investigated and considered for development in Hong Kong. Meanwhile, there are debates on the sustainable development of Lantau Island with increasing additional tourism resources. Taking Lantau Island as a case study, the strengths (S), weaknesses (W), opportunities (O) and threats (T) of existing situation of Lantau Island for ST development are initially examined. As SWOT of Lantau Island for ST development comprise many aspects, this research concentrated on the SWOT analysis in three main variables, namely (1) resource and attractions, (2) capital and (3) policies and planning. These are the fundamental variables derived (Deng *et al.*, 2002; Li and Dewar, 2003) to assess the tourism resources supply on Lantau Island for tourism development. It is believed that a clear understanding of SWOT in the aspects of these variables and the perception of stakeholders, including public sector stakeholders and tourism businessmen, can help articulate strategies for future ST development.

Already, there are various discussions on the implementation of practices which may contribute to successful ST development. “Tourism cluster” is one of such concepts suggested (Porter, 1998; Jonker, 2004; Lee, 2004). With reference to the Porter’s diamond framework (Figure 1.3), tourism resources (i.e. factor conditions) and tourism allies (i.e. related and supporting industries) will be identified in the SWOT analysis of Lantau Island for ST development. Tourism market (i.e. demand conditions) will be investigated from the interviews and survey with tourists and local community members on Lantau Island. With limited time and resources, the study has to be further narrowed down to one of the tourism clusters on Lantau Island – Ngong Ping, using a schematic concept as shown in Figure 1.4. There are generally four tourist attractions found within the Ngong Ping tourism cluster. The performances of these attractions in the context of ST are investigated by perception study with tourists and the locals. Incorporating the results of SWOT analysis and perception study, recommendations and strategies can be formulated for improvement of ST development in Hong Kong.

To provide a clear understanding of the processes of investigation, Figure 1.5 summarizes the process and the details are illustrated in the following chapters. The framework of methodology is modified from the Tourism Rapid Assessment (TRA) tool which provides a comprehensive framework for holistic tourism assessment. Primary and secondary data are adopted for investigation and stakeholders are encouraged to participate in the assessment process. Perception study with interviews and questionnaire survey is undertaken for data collection. Both qualitative and quantitative methodologies are also utilized in understanding the opinions and perceptions of stakeholders.

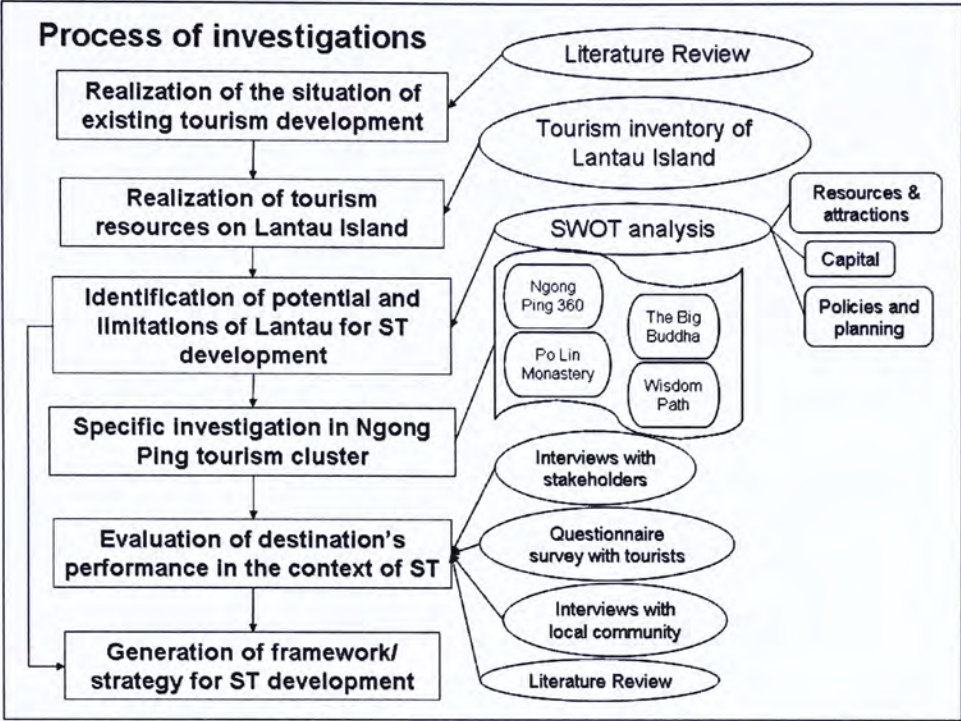


Figure 1.5 Processes of investigation

1.3 Research objectives

There is no doubt that tourism is at the core of Hong Kong’s economic activities. As events occurred, it was clear that tourism is prone to occasional changes. Although the industry shows resilience to events, the natural and cultural resources that abound in Hong Kong can be utilized to provide a solid base for tourism. Accepting this therefore, the government proclaimed the need for ST development (HKSAR, 1999b). While ST development appear to be a global trend encapsulating the needs of visitors, stakeholders and the resources upon which attractions are created, the modalities, policies, planning and implementation of ST development at a destination will have to be articulated.

This research attempts to make contributions to the strategies of implementing ST development in Hong Kong and Lantau Island. There are four main objectives:

1) To review current policies, planning and development of tourism in Hong Kong, especially on Lantau Island

In order to recommend and formulate strategies for ST development, it is vital to understand the existing situation before making judgment and suggestion for improvement. A review of current policies, planning and development of tourism in Hong Kong can delineate the general image of existing development with clear understanding on the issue. It provides essential background and baseline information for the conduction of further investigation. In addition to the secondary information, primary data collected from interviews with tourism stakeholders are also important in realizing the situation in different aspects. This study attempts to utilize both primary and secondary data in revealing current situation of tourism development in Hong Kong and Lantau Island.

2) To investigate and assess potentials and limitations for the development of ST on Lantau Island

It is generally acknowledged that Lantau Island has considerable amount of invaluable assets for ST development (GLA *et al.*, 1998; HKPD, 2001b; Lu, 2002; Peng, 2003; HKPD, 2004; Williams, 2005). To facilitate the implementation of ST practices, it is necessary to identify the potentials and limitations of the island in the context of ST. Resources and attractions, capital, and policies and planning are the three major components comprising fundamental resources supply in the tourism development. They are therefore, being chosen as the primary focus in assessing the potentials and limitations of Lantau Island for ST development. While the potentials of the island can be utilized and limitations be alleviated, it

can further enhance successful ST development.

3) *To evaluate the performance of the tourism cluster in Ngong Ping in the context of ST*

With the intention of realizing the progress of ST on Lantau Island, Ngong Ping tourism cluster which is a newly redeveloped cluster with both natural and cultural attractions, is selected to evaluate its performance in the context of ST. “Protection of the destinations’ resources attractions”, “visitor satisfaction with their experience”, “residents assessment on tourism development”, and “economic return on investment”, are the key dimensions of ST that have to be identified from the perception of relevant stakeholders, tourists, and local community members of this study. As one of the case study, it is believed that the results would be useful in revealing the existing development of tourism cluster in the context of ST in Hong Kong.

4) *To recommend and formulate strategies for ST development*

As Hong Kong is in the infant stage of ST development, problems and space for improvement would have been discovered. To strive for better and successful ST development, it is necessary to learn from mistakes and formulate more comprehensive strategies for long term tourism development. Based on the results derived from this research, recommendation and strategies would be articulated for ST development in Hong Kong.

1.4 Research significance

This research is significant as it is the first major tourism study that specifically investigating ST on Lantau Island. There were researches investigating tourism planning on the island (Amatya, 1995; Yuen, 1999). Some other researches examining individual attractions on the island were also conducted (Ng, 1999; Chan, 2003a;

Chan, 2003b; Kwee, 2005; Ho, 2006). However, there are limited amount of tourism research specifically investigating ST on Lantau Island. This study therefore, becomes the primary tourism research which reveals the progress of ST on the island and would be helpful for corresponding government departments or developers in planning for ST development strategies in Hong Kong.

Besides, this study attempts to display the understanding of ST concept by respondents in Hong Kong that may vary from the traditional interpretation. With reference to the literatures, ST concept is often interpreted by the scholars (Bramwell and Lane, 1993; Butler, 1993; McMinn, 1997; McCool, 1999; Hardy *et al.*, 2002; Sharpley, 2002; Liu, 2003) with four fundamental elements: “conserving environment and ecological diversity”, “conserving local culture and being socially desirable”, “sustaining economic development for generations”, and “ensuring satisfactory visitors experiences”. Yet, it is not totally the same when understood by the stakeholders and tourists interviewed in this study. The new and different interpretation presented by the respondents can provide significant idea to the academic discussion on the concept of ST.

Moreover, it is an evaluation of tourism cluster in the context of ST on Lantau Island. As the concept of tourism cluster is rather new, this research can provide some insights and discussions to the concept in relation to ST development in Hong Kong and specifically on Lantau Island. It is hoped that the applicable methodology and results can be replicated elsewhere.

Meanwhile, this research is carried out in between the period of before and after the opening of the Ngong Ping 360 project. The instant change in tourists’ and local residents’ perception towards the cluster can be seen. Results derived are vital for

tourism planners to realize the opinions of tourists and local residents immediately for further improvement.

1.5 Organization of thesis

The study is divided into eight chapters. Chapter One is general introduction with background information of the study. The development and planning of tourism in Hong Kong in the last decade is presented. Besides, the conceptual framework is provided to show the overall design of this research. Objectives and significances of the research are also identified.

Chapter Two reviews literature in related studies. The two major concepts in this study – ST and tourism cluster, are highlighted. Numerous amounts of literatures about ST were reviewed to provide thorough understanding on the importance of the concept. “Tourism cluster”, which is a newly developed idea in recent years, is described and explained with reference to the concept suggested by Porter (1998) and many other scholars (Cluster Consortium, 1999; Monfort, 2000; Beni, 2003; Malmberg, 2003; Nordin, 2003; Kindl and Carlos, 2005). In addition, the role of clustering of tourism resource in ST development is also illustrated to show the connection between the two concepts. On the other hand, it is more important to apply the conceptual ideas to the reality for investigations. The ST development of Hong Kong and the situation of tourism clustering in Hong Kong are thus reviewed as well.

Chapter Three provides detail information of the study area – Lantau Island and Ngong Ping. It mainly focuses on describing tourism resources with an inventory of Lantau Island in the aspect of resources and attractions, capital, and policies and planning. It presents fundamental information of the island and set the pace for further investigations.

Chapter Four illustrates the methodology employed in this research. Tourism Rapid Assessment (TRA) provides the general framework of methodology for evaluation. SWOT analysis is adopted to investigate the potentials and limitations of Lantau Island from stakeholders' perspectives. Interviews and surveys are also undertaken to collect information. Rationales and details including sample selection, questionnaire design and data analysis of the methodologies are stated in details.

Both Chapter Five and Six presents findings of this research. Chapter Five shows the findings from interviews with stakeholders. Results of SWOT analysis are shown with tables. The perception of stakeholders on the concept of ST and tourism cluster, existing tourism policies and development in Hong Kong and on Lantau Island, as well as their opinions on the performance of tourism cluster in Ngong Ping are similarly demonstrated.

Chapter Six shows the findings of questionnaire survey with tourists and interviews with local community members in Ngong Ping. The perception and satisfaction of tourists with their experience in Ngong Ping tourism cluster are revealed. The opinions of local community members on the existing tourism development in the region are also illustrated.

Chapter Seven provides discussions based on the findings derived. A review of tourism policies and development in Hong Kong and Lantau Island is provided. The understanding of ST by respondents is also shown to provide insights in the interpretation of the concept. Besides, potentials and limitations of Lantau Island for ST development are further discussed with reference to the findings adopted from different respondents. To have specific focus on the issue, the performance of tourism cluster in Ngong Ping in the context of ST is demonstrated as well.

Chapter Eight summarizes the results and discussions with conclusion of the study. Strategy and recommendations for implementation and improvement of ST development in Hong Kong are presented. Limitations of the study are stated for future improvement. Suggestions are also made for further studies.

CHAPTER 2 LITERATURE REVIEW

Large amount of works exist on the topic related to sustainable tourism (ST). Given the importance of this aspect of the tourism industry, *Journal of Sustainable Tourism* was created to satisfy the growing trend of interest and provide more avenues for publication and information dissemination. This chapter therefore summarizes and further illustrates key concepts relevant and important to the research theme. The review is generally divided into four parts: (1) Literature on ST; (2) Understanding of tourism clusters; (3) The role of tourism clusters in ST development; and (4) ST development and tourism clusters in Hong Kong. Researches done on tourism industry in Hong Kong will be briefly reviewed to provide an understanding and framework for analysis.

2.1 Concept of Sustainable Tourism

2.1.1 Development and definition of Sustainable Tourism

The concept of sustainability was aroused by the growing international attention on the deteriorating environment resulting from destructive human activities. In 1980, publications of the World Conservation Strategy (IUCN *et al.*, 1980) and the Brandt Commission Report highlighted the plight of the environment with economic development (Romeril, 1998). The concept of “sustainable development”, which is defined as “*development that meets the needs of the present without compromising the ability of future generations to meet their own needs*” was postulated in the Brundtland Report in 1987 (WCED, 1987). Following from this, the concept of sustainability in the tourism industry led to the introduction of “sustainable tourism” in the late 1980s. It was believed that the search for sustainability in tourism was similarly driven by the growing environmental awareness and cultural sensitivity, as

well as the realization of the vulnerability of various precious resources in destination regions (Prosser, 1994). Thus, the attitudes of developers and tour operators began to change and looked for alternative forms of tourism. These attitudes and social changes are noticeable all over the world, as well as in the tourism industry of Hong Kong.

As a result of the growing trend in the sustainability discourse as it regards the tourism industry, a large amount of definitions for ST were proposed (Bramwell and Lane, 1993; Butler, 1993; McMinn, 1997; Garcia-Falcon and Medina-Munoz, 1999; Hardy *et al.*, 2002; Sharpley, 2002; Liu, 2003). It was mostly described as an approach which maintain and sustain favorable relations between tourism and both natural and cultural environments for a long period of time. It has been defined by Bramwell and Lane (1993) as a *“positive approach intended to reduce the tensions and friction created by the complex interactions between tourism industry, visitors, the environment and the communities..... and that it is not anti-growth, but it acknowledges that there are limits to growth”* (Bramwell and Lane, 1993, p.1). Some scholars (Nelson *et al.*, 1993) suggested that “ST” is not the same as “sustainable development in the context of tourism”. ST refers to “tourism which is in a form which can maintain its viability in an area for an indefinite period of time”. “sustainable development in the context of tourism” means:

Tourism which is developed and maintained in an area in such a manner and at such a scale that it remains viable over an indefinite period and does not degrade or alter the environment in which it exists to such a degree that it prohibits the successful development and wellbeing of other activities and processes (Butler, 1993, p.27).

This definition did not only concern the time, but also the interaction between tourism, environment and other activities within the area. Meanwhile, the World Tourism

Organization of the United Nations (UNWTO) announced a definition for ST in 1993:

Sustainable tourism development that meets the needs of present tourists and host regions while protecting and enhancing opportunities for the future. It is envisaged as leading to management of all resources in such a way that economic, social and aesthetic needs can be fulfilled while maintaining cultural integrity, essential ecological processes, biological diversity and life support system (UNWTO website, 2004).

This definition highlights the interconnectedness between ST objectives and those of sustainable development (Eligh *et al.*, 2002).

Although ST has been promoted for decades, there are different explanations as to what it stands for. Many scholars, for example, Butler (1991), De Kadt (1992), Clarke (1997), McCool, (1999), Hardy *et al.* (2002), etc., have provided various interpretations of ST. The first view was that mass tourism was extremely opposite as compared with ST. It was conceived that ST was “good”, “kinder and gentler” and small in scale while mass tourism was “bad”, “destructive” and large or unsustainable in scale (Butler, 1991; Clarke, 1997). In many cases, mass tourism was blamed as solely responsible for negative social and environmental impacts to destinations, and therefore should totally be replaced by sustainable or alternative tourism (De Kadt, 1992). On the other hand, the second group of people advocated that there was a continuum between ST and mass tourism (Wheeller, 1991; De Kadt, 1992).

From the foregoing, Clarke (1997) indicated that in addition to the scale of operation, mass tourism can be subjected to improvement particularly the physical environment and environmental management systems. Accepting this therefore, McCool *et al.* (1998) suggested that sustainability should be seen as a goal rather than a means. This can then provide the tourism industry with a strategic framework from

which to react to change with uncertainty.

In view of the above, UNWTO has reaffirmed the conceptual definition of sustainable development of tourism in 2004. Based on the previous definition, it further emphasizes that *“sustainable tourism development guidelines and management practices are applicable to all forms of tourism in all types of destinations; including mass tourism and the various niche tourism segments”* (UNWTO website, 2004). This definition was considered to be more comprehensive and closer to the interpretation that ST is the goal for all kinds of tourism. It is at the same time the goal of the Hong Kong government in tourism development (HKTb, 2005b).

Given that this is the case, Eber (1992) provided a definition for ST that might be suitable for urbanized areas like Hong Kong.

Tourism and associated infrastructure that, both now and in the future operate within natural capacities for the regeneration and future productivity of natural resources, recognize the contribution that people and communities, customs and lifestyles make to the tourism experience, accept that these people must have an equitable share in the economic benefits of tourism, and are guided by the wishes of local people and communities in the local area. (Eber, 1992, p.3)

This definition therefore forms the basic understanding of ST upon which this research is undertaken.

In addition, Murphy (1991) in an ecological model for tourism planning, presented four elements that are considered fundamental to tourism sustainability.

They were summarized by Hinch (1998, p.186) as:

- (1) The protection of the destination's resource attractions;
- (2) Positive response of residents towards tourism development;
- (3) Visitors' satisfaction with their experience; and
- (4) Acceptable return on investment for tourism operator.

It is assumed that tourism development can be sustained for long term once the four conditions above are achieved. It is this understanding that formed the fundamental elements for investigations in this research.

2.1.2 Principles of Sustainable Tourism

ST embraces several key principles which can be generalized as maintaining sustainability of the tourism industry in environmental, socio-cultural and economic aspects. Owen *et al.* (1993), McCool *et al.* (1998) and McKercher (2003) have all illustrated the principles of ST as practiced in various areas, based on those announced by the UNWTO. It has been summarized as (1) optimum use of both natural and cultural resources while keeping the biological diversity; (2) minimization of ecological, social and cultural impacts; and (3) maximization of benefits to conservation and local communities (Ap and Sit, 2005). Some scholars (Coccossis and Nijkamp, 1995; Butler, 1998) found that there are at least four ways to interpret tourism with respect to the principles of sustainable development: (1) economic sustainability; (2) ecological sustainability; (3) the long term viability of tourism; and (4) accepting tourism as a part of an overall strategy for sustainable development. Among the interpretations, the long term viability of tourism development which maintains social, economic and environmental sustainability is considered to be more appropriate and inclusive (Owen *et al.*, 1993; McCool *et al.*, 1998; McKercher, 2003).

The principles (UNWTO website, 2004) listed here below, are often served as the guidelines for ST practice despite their generality and vagueness in nature (Berry and Ladkin, 1997).

- 1) *Entail a long-term perspective and make optimal use of environmental resources which are crucial elements in tourism development, so as to maintain essential ecological processes and conserve natural heritages and biodiversity*

It is believed that short-term benefits may lead to the scarification of long-term social equity and environmental protection (McCool *et al.*, 1998). Considering long-term rather than short-term profits may create greater concern about the impacts to the environment. Careful consideration and mitigation to the impacts of tourism activities to the natural environment are vital in tourism planning and activities.

- 2) *Respect the socio-cultural authenticity and characters of the host communities, conserve their cultural heritages and traditional values, and contribute to the inter-cultural understanding and tolerance*

Both tangible (cultural buildings like temples) and intangible (traditional habits) socio-cultural heritages are also valuable to the sustainability of the host communities. They are valuable in contributing to the intra-generation as well as inter-generation understanding of the culture.

- 3) *Ensure long-term and viable economic operations, providing socio-economic benefits and creating equality to all stakeholders, that contribute to poverty alleviation*

Regarding economic sustainability, it should be profitable in both immediate and long term. Those profits often refer to the level of economic gain from tourism activities sufficient either to cover the cost of measures taken to serve

tourists and to mitigate the impacts of tourism activities, or to offer an income to the inconvenience caused to the community visited or both (Mowforth and Munt, 1998; McKercher, 2003).

- 4) *Require the informed participation of all relevant stakeholders (including NGOs, local communities, local businesses and civic groups) and strong political leadership (government and competent authorities) to ensure extensive participation and consensus building during the whole process*

As tourism development involve all components of the society, it is essential to have contributions by all relevant stakeholders to offer knowledge and expertise for planning decisions (UNEP, 2005).

- 5) *Maintain high level of tourist satisfaction and ensure a meaningful experience to the tourists, raising their awareness about sustainability and promoting ST practices amongst them*

High level of tourist satisfaction is vital to the sustainability of the tourism activities as tourist is the major component and customer that influences the development of tourism industry. Maintaining high level of tourist satisfaction in long term can ensure the demand for tourist activities in a longer period of time. And, educating the public about the importance of sustainability may facilitate the promotion of ST practices amongst them.

- 6) *Aim for quality rather than quantity. Communities measure tourism success not only by numbers of visitors, but also the distribution of money spent, length of stay, quality experience, etc.*

Aiming at quality instead of quantity is an essential principle for the success of sustainability in tourism industry, as satisfactory quality can maintain a

desirable quantity especially in the economic aspects.

The principles proposed above are comprehensive in understanding and operationalizing ST. Whether or not they will be applicable and useful in the context of Hong Kong is yet to be identified. For pursuing this research, a set of principles suggested by Eber (1992) was adopted as guidelines for ST investigation. These were also frequently employed in various researches (Forsyth, 1997; Farsari and Prastacos, 2001; Cicerchia, 2003). While the principles could generally be divided into the three major focuses of ST, namely environmental, socio-cultural, and economic aspects, the simplified principles are listed as follows (Eber, 1992, p.3):

Environmental aspect

1. Using resources sustainably
2. Reducing over-consumption and waste
3. Maintaining diversity

Socio-cultural aspect

4. Involving local communities
5. Consulting stakeholders and the public
6. Training staff

Economic aspect

7. Integrating tourism into planning
8. Supporting local economies
9. Marketing tourism responsibly
10. Undertaking research

2.1.3 Methods of Sustainable Tourism assessment

In the late 1990s, scholars (McCool *et al.*, 1998; Welford *et al.*, 1999; Ceron and Dubois, 2003) realized the importance of practical implementation rather than conceptual argument of the concept of ST. They also recognized the significance of measuring and assessing the existing sustainability progress of the industry in order to facilitate the monitoring process. To fill the gap between theoretical demands and practical achievements of ST, various methods were suggested to assess status of tourism sustainability. The following sections describe some of the methods used for tourism sustainability measurement.

2.1.3.1 Indicators of Sustainable Tourism

The use of indicators is one of the ways to monitor development and maintain sustainability (Choi, 2003). Substantial amount of indicators were identified (Filho, 1996; Wight, 1998; McCool, 1999; Welford *et al.*, 1999; Allin *et al.*, 2001; James, 2001; Middleton and Hawkins, 2001; Twining-Ward and Butler, 2002; Ceron and Dubois, 2003). However, most of the indicators cannot be operated effectively. This was mainly due to the inconsistency in defining and understanding the concept.

In order to have accurate assessment of sustainability for a destination, some criteria for ideal indicators were written specifically for ST development (Bloyer *et al.*, 2004). Figure 2.1 summarizes the conditions for an ideal indicator of ST suggested by various scholars (McCool *et al.*, 1998; Wight, 1998; Bloyer *et al.*, 2004).

Criteria for ideal indicators of ST	
1.	Reliable
2.	Relevant
3.	Directly observable
4.	Easy to measure, collect and use
5.	Reflect understanding that some change in normal
6.	Sensitive to changing use conditions
7.	Reflect appropriate scales (spatial and temporal)
8.	Have ecological, not institutional or administrative boundaries
9.	Encompass relevant structural, functional and compositional attributes of the ecosystem
10.	Include social, cultural, economic and ecological components
11.	Have predictive ability
12.	Relate to the objectives of the area
13.	Amenable to management
14.	Site-specific

Figure 2.1 Criteria for ideal indicators of ST

Data Source: McCool *et al.*, 1998; Wight, 1998; Bloyer *et al.*, 2004

There are various kinds of indicators for ST development. McCool *et al.* (1998) noted that indicators of ST can be divided into at least six types. They are (1) Warning indicators; (2) Measures of pressure or stress; (3) Measures of the state of the natural resource base and use levels; (4) Measures of impacts or consequences; (5) Measures of management effort or action; and (6) Measures of management impact. This can assist planners in selection of suitable indicators for measurements of ST development.

Since 1992, UNWTO and other organizations like International Institute for Sustainable Development (IISD) have undertaken work on designing indicators for ST (Welford *et al.*, 1999). Yet, the indicators proposed were found to be simple and general. In 1997, a group of experts led by Edward Manning published a practical guide to indicators of ST for the UNWTO (Ceron and Dubois, 2003). Two series of indicators include fundamental indicators (Table 2.1) for ST and indicators specific to each type of destination (e.g. seaside, park, etc.). However, some of the indicators were criticized (Ko, 2005) as imprecise and difficult to be implemented or quantified.

It will be seen whether or not such indicators can be relevant to selected destinations as is investigated in this study.

Table 2.1 Fundamental indicators of ST (UNWTO, 1997)	
Indicators	Specific measuring instruments
Site protection	Category of protection of the site according to the index of the UICN
Pressure	Number of tourists visiting the site (by year/ month)
Intensity of use	Intensity of use in peak period (people/ hectare)
Social impact	Ratio tourists/ inhabitants (average and in peak period)
Development control	Existence of a procedure to study the environment or of true controls of planning and density of use
Waste management	Percentage of waste water treated
Planning process	Existence of a systematic plan for the area of the tourist destination (including a "tourism") component
Fragile ecosystems	Number of rare or threatened species
Consumer satisfaction	Degree of satisfaction of the visitors (according to a questionnaire)
Satisfaction of the inhabitants	Degree of satisfaction of the inhabitants (according to a questionnaire)
Contribution of tourism to the local economy	Proportion of the global economic activity due to sole tourism
Composite indexes	
Carrying capacity	Composite measuring instrument warning on the state of key factors influencing the capacity of the site to handle various levels of tourism
Site disturbance	Composite measuring instrument of impact levels on the site
Interest/ Attractiveness	Qualitative measuring instrument of the characteristics of the site which make it attractive for tourism and which can change in time

Source: Ceron and Dubois, 2003

Furthermore, some researchers recommended the need for more precise and detail indicators for ST. Consequently, those indicators proposed in the following years were founded to be more practical (Cruz, 2003). In 2001, a set of UK indicators for measuring ST progress was created by various cooperation of the government.

On the other hand, Vellas (2004) presented a set of indicators divided into environmental indicators, socio-economic indicators and tourism sustainable

indicators (Appendix 1). Each type of indicators was further sub-divided. They were regarded as more holistic and did show some improvements compared with the previous indicators.

2.1.3.2 Carrying Capacity

As pointed out by most scholars (Mowforth and Munt, 1998; Wight, 1998; Benfield, 2001), “Carrying Capacity” (CC) is one of the key indices to be considered in planning and managing ST. It is a term firstly borrowed from wildlife ecology, applied to the tourism context and defined as “*maximum number of people that may visit a tourist destination at the same time, without causing destruction of the physical, economic, socio-cultural environment and an unacceptable decrease in the quality of visitors' satisfaction*” (UNEP website, 1997). It indicates the maximum sustainable population of a destination for the sustainable development of tourism activities. Despite the wide discussion of the concept of CC (Wight, 1998), few studies have mentioned specifically the details in applying CC in tourism management.

2.1.3.3 Other technical measures for Sustainable Tourism assessment

Besides indicators and CC, Fyall and Garrod (1997) and Goodall and Stabler (1997) have made efforts in suggesting practical framework, methodology and techniques for measuring the progress towards ST development. They suggested using “money” as the common unit of measurement. It can be regarded as a macro approach that a kind of environmental balance sheet is made in assessing the progress of ST (Fyall and Garrod, 1997). It was trying to quantify the qualitative elements for easier assessment. It can be applied by the hedonic pricing method (HPM), the travel cost method (TCM) and the contingent valuation method (CVM).

The micro approach, which is the cost-benefit analysis (CBA), has also been

suggested (Fyall and Garrod, 1997). It reduces the scale of assessing sustainability from the whole tourism sector to specific individual investment projects. The approach involves the use of investment appraisal techniques to determine if the new tourism investment is compatible with sustainability rules of the whole tourism sector. Techniques have already been used in the real world since 1930s (Fyall and Garrod, 1997). Yet, CBA has been rarely included in the implications of projects on natural environment. Fortunately, scholars (Pearce *et al.*, 2006) are keeping on trials and errors in modifying the technique to suit for sustainability evaluation. Though the methods recommended may not be the best in assessing sustainability, it did make a step forward to the monitoring of ST progress.

2.1.3.4 Perception study in Sustainable Tourism assessment

Perceptions of stakeholders (e.g. tourists, local residents, tourism business operators, etc.) on tourism development have been extensively investigated for decades. Most studies (Akis *et al.*, 1996; Brunt and Courtney, 1999; Andereck and Vogt, 2000; Tosun, 2002; Qin *et al.*, 2005) have focused on the impacts of tourism activities on residents, or the satisfaction of tourists towards their experience at destinations. Recently, perception study is also considered (Kaae, 2001; Miller, 2001; Cottrell *et al.*, 2004; Choi and Sirakaya, 2005; Ko, 2005; MsDonald, 2006) as one of the effective tools in assisting the assessment and investigation of tourism sustainability issues. Ko (2005) recommended perception study as one of the most appropriate approach to assess tourism sustainability. Ko (2005) believed that the attitudes of stakeholders can provide data to measure the quality of some indicators which could not be measured in numerical form.

Additionally, some scholars (Cottrell *et al.*, 2004) argued that some tourists' destination choices were affected by stakeholders' perceptions of sustainability

aspects. Despite the lack of understanding of tourists on the impacts and changes of tourism on the destination, it was considered important to realize the insights and sensitivities of tourists on tourism sustainability issues. Given this, Kaae (2001) carried out survey of tourists and residents to assess and compare the interest in ST and environmental initiatives among tourists and hosts. It was regarded as essential to know the relationship between local residents' satisfaction with environmental understanding in ST development (Kaae, 2001).

Choi and Sirakaya (2005), on the other hand, conducted perception study to assist the development of ST attitude scale. They conducted questionnaire survey with residents in New Braunfels to capture residents' attitudes. A comprehensive scale of resident attitudes toward ST was successfully developed documenting residents' perception towards tourism and its impacts (Choi and Sirakaya, 2005).

Other than the opinions of tourists and local residents, inputs from experts were often adopted in ST researches. Miller (2001) employed the Delphi technique to generate opinions from a group of experts in ST issues. It aimed at developing indicators for ST promotion and monitoring. Besides, Berry and Ladkin (1997) made use of focus group to get opinions of groups of small tourism businessmen. Results were significant in realizing the barriers to the implementation of ST in a regional perspective.

Recently, McDonald (2006) utilized both qualitative and quantitative methodologies to interview tourism stakeholders in understanding ST development from a complex systems perspective. It aimed at investigating the underlying issues and attitudes that influence ST development outcomes and development. McDonald (2006) further considered the use of perception study in ST development research.

Despite the fact that some of the tourism sustainability issues could not be concluded by simply studying the perception of people, perception study shows fundamental contribution in realizing the attitudes of stakeholders for the sake of successful ST development. Hence, opinions of stakeholders were collected as one of the major sources of information for investigation in this research.

2.2 Clustering of tourism resources

As discussed in the preceding section, “tourist” is an important component in tourism industry that highly influences the sustainability of tourism development. In order to attract more tourists to an area and induce them to stay longer, as well as making it more convenient for organizing tours and providing infrastructure and management, clustering of tourism resources is one of the ideal options (Inskeep, 1991).

Traditionally, the term “cluster” was used to describe a particular form of industrial organization. It refers to the “*grouping of sectorally specific enterprises in a particular location*”, like the information technology in the Silicon Valley (Cluster Consortium, 1999, p.39). In this sense, the key characteristics of a cluster is the geographic proximity of firms and their sectoral specificity which can enhance firm competitiveness as well as cooperation through the linkages caused by such arrangements. Another scholar, Porter (1998, p.78) defines clusters as the “*geographic concentrations of interconnected companies and institutions in a particular field, linked by commonalities and complementarities*”. Other than geographic proximity, the connections between vertical and horizontal value chains of the particular economic sector have become more important in this sense (Cluster Consortium, 1999).

Given the variety of definitions, there may be confusion in the interpretations and meanings of cluster. A Swedish scholar, Anders Malmberg (2003), has distinguished three meanings of cluster. First, cluster can be seen from a functional dimension, which focuses on related firms and industries knitted together by a network or production system. Second, cluster can be interpreted as a spatial phenomenon. It is the agglomerations of similar and related businesses within a limited geographic area. Third, cluster is considered as a development strategy. It takes the form of policy programs promoting clusters, which intend to create well-known regional brands like Hollywood (Malmberg, 2003).

Besides the three categories explained by Malmberg (2003), another scholar, Sara Nordin, suggested the concept of “thematic clusters” (Nordin, 2003). It is a kind of cluster formed based on a particular theme. Examples in tourism context include heritage tourism, adventure tourism, sports tourism, etc. The thematic cluster is rather functional than spatial phenomenon. The success of such clusters depends on the collaboration of the value chain of participants to form “packages” and work in synergy to provide comprehensive experience for the market segments (Nordin, 2003).

As there are different definitions and types of clusters, the question of the boundaries of clusters is often raised. However, the boundaries of cluster do not follow ordinary administrative borders (Nordin, 2003). The boundaries of clusters change constantly with the dynamic feature of cluster. Indeed, Porter (1998) had earlier mentioned that the geographic scope of cluster can range from a single city or state to a country or even a group of neighboring countries. It is clear that clusters can have different geographic forms and different scale as well as dimensions depending on corresponding situations.

Whereas cluster is the concentration of companies, clustering is “*the process of cooperation within an existing cluster in order to strengthen its competitive capability or the process of speeding up economic development through the intensive support of a cluster*” (Cluster Consortium, 1999, p.40). It is an influential process that helps the cluster to speed up its competitiveness and accelerate growth.

2.2.1 Tourism cluster

Based on the concept of cluster, some scholars (Monfort, 2000; Beni, 2003; Kindl and Carlos, 2005) attempted to narrow down the focus of cluster on tourism industry. It is believed that the attractiveness, economic and cultural sustainability and quality of life are variables that make tourism cluster different from others (Kindl and Carlos, 2005). A scholar, Monfort (2000), highlighted cluster as characteristics and components, and defined tourism cluster as follows:

A complex group of different elements, including services carried out by tourism companies or businesses; richness provided by tourist holiday experiences; multidimensional gathering of interrelated companies and industries; communication and transportation infrastructures; complementary activities; supporting services; and natural resources and institutional policies. (Monfort’s website, 2000)

Some of the elements stated by Montfort can also be considered as various types of tourism resources. On the other hand, Beni (2003) highlights the cohesion between agents and cooperation by creating company nets when defining tourism cluster.

A group of highlighted tourism attractions within a limited geographic space provided with high quality equipment and services, social and political cohesion, linkage between productive chain and associative culture, and excellent management in company nets that bring about comparative and

competitive strategic advantages. (Beni, 2003, p.74)

As described in the two definitions, tourism cluster can simply be understood as the clustering of tourism resources or attractions within a limited geographic area. It is based on the idea that all players within the tourism destination or cluster must work together to enhance the destination's competitiveness (Hawkins, 2004a).

Furthermore, tourism cluster can also be explained in two ways involving horizontal clustering (by the creation of strategic alliances), and vertical clustering (by the creation of strategic nets) (Rodrigues, 2001). Those companies concentrated with the features of horizontal and vertical relationships usually show a configuration that includes (Kindl and Carlos, 2005): (1) a set of tourist attractions that draw tourist attention; (2) the concentration of tourism service companies like restaurants, hotels, transport services, etc.; (3) sectors providing support to tourism services; (4) suitable infrastructure like roads, energy, etc.; (5) companies and institutions that provide specialized information and financial investment; (6) intern agents organized into class associations; and (7) government agencies and other regulating bodies that affect tourism clustering.

From a geographical perspective, the focus of tourism cluster in this research was considered as "the clustering of tourism resources or attractions within a limited geographic area". With the recent development of tourism on Lantau Island, it is pertinent to investigate whether this will portray the characteristics and functions of a tourism cluster.

As mentioned earlier, the boundary of a cluster may change constantly; the scope of a tourism cluster may also vary from place to place continually according to the capacity of the destination. The size of a cluster will thus vary with reference to

corresponding situations.

2.2.1.1 Advantages of the formation of tourism cluster

There are many advantages in clustering of tourism resource. One such benefit is that clustering can enhance cooperation as well as competition between companies and entities within the sector (Nordin, 2003). To get benefits from the economies of scale, the cooperation between companies can increase the capacity in negotiating for a higher discount in purchase and booking. Companies or entities within a tourism cluster usually operate in similar features and might require similar resources or materials to operate successfully.

Other than the sharing of facilities and infrastructure, they can also share technical competencies, market intelligence as well as human and financial resources (Nordin, 2003). This helps organizations or companies to be more prepared to deal with unexpected or uncertain events. In addition, the provision of an integrated and coordinated supply system in the cluster can offer effective marketing action for the destination, which is essential for successful tourism development destinations.

Apart from cooperation, competition can be vigorous and simultaneous within the cluster. Competition between companies within the same sector is unavoidable. Yet, it also brings benefits. One of the key advantages of competition is its drive for improvement. Competitions for profits encourage and keep companies in the mode of continuously improving their performance to maintain competitiveness.

Porter (1998) pointed out that competition is beneficial to cluster and cluster can also affect competition in three broad ways: (1) by increasing the productivity of companies based in the area; (2) by driving the direction and pace of innovation which underpins future productivity growth; and (3) by stimulating the formation of

new businesses that expands and strengthens the cluster itself (Porter, 1998).

Cooperation as well as competition between enterprises within the cluster can create synergies that strengthen the region and the sector (Cluster Consortium, 1999). In tourism clusters, the companies depend on each other to satisfy visitors. The quality of tourists' experiences depends not only on one attraction, but also on the quality and efficiency of the complementary businesses. Will this phenomenon be equally discernible in the context of Hong Kong is questioned.

2.3 The role of clustering of tourism resource in Sustainable Tourism development

Clustering of tourism resources seems to be beneficial for tourism development, but can it contribute to ST development?

When discussing tourism cluster, it is impossible to ignore the concept about "destination competitiveness". The competitiveness of tourism cluster is influential in affecting the sustainability of the destination. There are many definitions for the term "competitiveness" which is recognized as a multifaceted concept (Dwyer and Kim, 2003a and b). Hassan (2000) defines competitiveness as "*the destination's ability to create and integrate value-added products that sustain its resources while maintaining market position relative to competitors*" (Hassan, 2000, p.240). Dwyer and Kim (2003a) stated that competitiveness is associated with three major groups of thoughts, including (1) comparative advantages and price competitiveness perspective; (2) a strategy and management perspective; and (3) a historical and socio-cultural perspective. (Dwyer and Kim's website, 2003)

To be competitive, the tourism development of a destination must be sustainable

in economic, ecological, social, cultural and political aspects. Ritchie and Crouch (2000) observed that the most competitive destination is the one which brings the greatest success to its residents on a sustainable basis.

For destinations to be sustainable, there are four determinants of competitiveness which are mutually dependent on each other as suggested in the national competitiveness model by Porter (1990). The determinants (Refer to Figure 1.3 in Chapter 1) are (1) factor condition including the conditions of the economic infrastructure affecting tourism companies (e.g. natural and cultural resources, infrastructure, territorial regulations, etc.); (2) demand condition concerning the trend and market condition facing the industry (e.g. volume and seasonal conditions, tourist motivation and behavior, etc.); (3) related and supporting industries; and (4) firm strategy, structure and competition regarding the operating conditions of the companies of the sector. As the four determinants are related to each other, the effect of one attribute is contingent on the state of the others (Jonker, 2004).

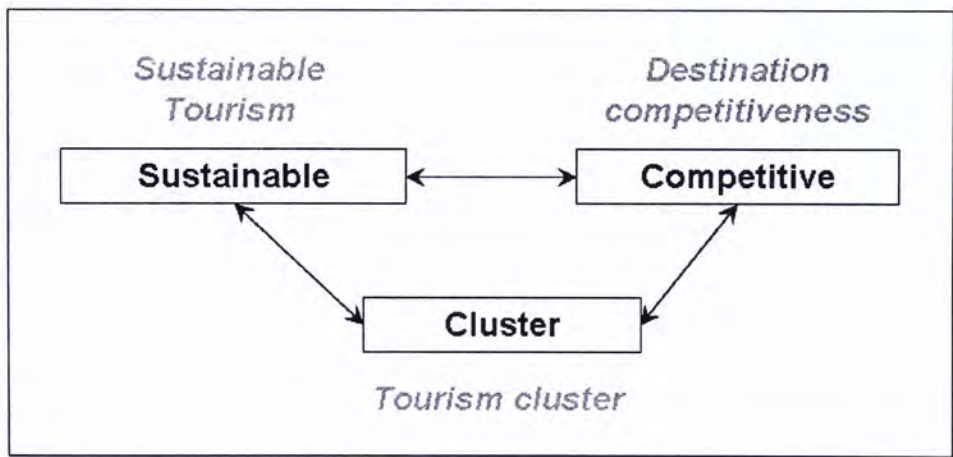


Figure 2.2 Interrelationship between cluster, competitiveness and sustainability

As pointed out before, the tourism development of a destination must be sustainable in economic, ecological, social, cultural and political aspects to become competitive while competitiveness can be achieved by the formation of cluster (Figure

2.2). It further reveals the interrelationships between tourism cluster, destination competitiveness and ST development. It also implies that clustering of tourism resources may enhance the competitiveness of destination and so as the sustainable development of tourism in the region.

2.4 Situation of Hong Kong

2.4.1 Trend and implementation of Sustainable Tourism in Hong Kong

In recent times, ST is one of the goals for most of the countries in managing tourism development, and Hong Kong is no exception. The appearance of ST in local policy followed the discussion of strategy for sustainable development in Hong Kong in 1997. The Study on Sustainable Development for the 21st Century in Hong Kong (SUSDEV 21) was undertaken in response to the need to consider environmental and social concerns in addition to economic concern in making decisions for the future development of Hong Kong (HKPD, 1998). The principles and indicators of sustainable development for Hong Kong were articulated in that study.

The discussion of ST development in Hong Kong was initiated by the Hong Kong Tourism Association (HKTA, now Hong Kong Tourism Broad), and funded by the Department of Industry and Trade. It was the first formal discussion of ST by six major industry associations³ in Hong Kong, aiming at the formulation of strategy for the sustainable development of the industry (Ap, 2006).

The Environmentally Sustainable Development Strategy (ESDS) for Hong Kong's Travel and Tourism Industry was prepared and released in April 2000. The

³ The six major industry associations include: Hong Kong Tourism Association / Hong Kong Tourism Broad, Association of Better Business and Tourism Services, Board of Airline Representatives Association, Hong Kong Catering Industry Association, Hong Kong Hotels Association, The Travel Industry Council of Hong Kong

strategy was made to help steer future growth of tourism industry on a path towards environmentally sustainable development (HKTA, 2000). It encouraged industries to enhance environmental quality while fulfilling economic requirements without compromising opportunities for future generations. The ESDS was arranged into four Priority Areas (HKTA, 2000):

(1) Environmental management.

It focuses on measures to improve environmental quality in Hong Kong, with emphasis on nature conservation; waste management; energy, fresh water and wastewater management; hazardous substances; and transportation.

(2) Sustainable training, education and public awareness.

It aims at fostering education on environmentally sustainable development practices for industry members, and providing corresponding skills or techniques to carry out tasks.

(3) Facilitating exchange of information, skills and technology related to sustainable travel and tourism.

The primary objective of this priority area is to enhance the sharing of knowledge and experience regarding the available information, skills and technology of environmentally sustainable practices among industry members. It is hoped that the exchange of experiences may improve their operational efficiency.

(4) Landuse planning and new tourism product development

It focuses on the preservation and protection of natural or special areas by considerable land-use planning. It is believed that the development of new tourism products in the future should also pay attention to the preservation of biodiversity, historical or cultural significance areas.

Although the ESDS appeared to be ideal in taking account of the social and environmental concerns in tourism development, the achievements and effectiveness of ESDS are questionable after nearly a decade of time. In the recent years, stakeholders of the tourism industry realized that there is a lack of effective monitoring system in supervising the implementation of ST practices in Hong Kong. Besides, the lack of guidelines, indicators and policies to help the industry makes the ESDS unachievable.

In spite of the vague direction for ST development, one of the projects of the Mass Transit Railway Corporation (MTRC) of Hong Kong attempted to establish a framework for ST development. The Project, "Ngong Ping 360", consists of the construction of Cable Car connecting between Tung Chung and Ngong Ping, and a cultural village on the Ngong Ping Plateau of Lantau Island. The project was suggested by the government in 1998 and the MTRC was granted the franchise in 2002 to construct, operate and maintain the Cable Car system (LC, 2006) and by extension, the tourism cluster. To ensure minimum destruction on the environment and the community, the MTRC formed a Sustainability Advisory Board (SAB) before and during the implementation of the project. Although the outcomes may not be perfect, it is already a progress that seems sustainable in such project.

In a related example, to reawaken the importance of ST development in Hong Kong, a group of enthusiasts established the Coalition on Sustainable Tourism (CST), which was previously known as Sustainable Tourism Task Force (STTF), in January 2004. CST is enthusiastic to instill a greater understanding of the environmental, social and economic benefits of ST development for the government, local residents and visitors in Hong Kong as well as the neighboring regions (BEC, 2004). Though the coalition does not have decisive power in influencing the policy making of

government, it does provide a platform for the stakeholders and enthusiasts to discuss a better way for ST development in Hong Kong.

2.4.2 Clustering of tourism resource in Hong Kong

The idea of tourism cluster arose in Hong Kong recently. It became one of the intentions of government for tourism development in various parts of the city. Several projects have been recommended, planned or implemented by the government (HKPD, 2002b; TC, 2006) in major tourism clusters as follows:

- Development of a major tourism cluster on Lantau Island, comprising the Big Buddha, Hong Kong Disneyland, Ngong Ping 360, and Sunny Bay tourism node, as the long term vision (HKPD, 2002b).
- An area integrated with heritage, entertainment and dinning in the Central district. (TC, 2006).
- Development of Aberdeen Harbor tourism node together with the redevelopment plan of Ocean Park (TC, 2006).
- A culture district and new tourism nodes comprising performance venues, museums, and large-scale multi-purpose stadium in West Kowloon (HKHAB, 2006).

In addition, Lee (2004), a member of the tourism strategy group of Hong Kong, has suggested some other potentials of developing tourism clusters in Hong Kong in the future. Some of them are listed in Table 2.2. All these suggestions showed that the government may also like to derive benefits from tourism clustering.

Table 2.2 Proposed Tourism Clusters in Hong Kong

Proposed Tourism Clusters	Contents
Lantau Tourism Cluster	Hong Kong Disney Theme Park
	Lantau Island Beach Volleyball Playground
	Lantau Island Ecosystem Education Center
	Lantau Island Fishing Center
	Lantau Island Fishing Village Dinning Area
	Lantau Island Green Farm
	Lantau Island Mui Wo Water Activity Training Center
	Lantau Island Silver Mine Cave Exhibition Hall
	Lantau South Transportation Node
	Tung Chung Cable Car
	Yam O Tourism Node
Kowloon Tourism Cluster	Former Marine Police Headquarters
	Southeast Kowloon Tourism Node
	Tsim Sha Tsui Promenade Beautification Project
	West Kowloon Arts, Cultural and Entertainment District
Cheung Chau Tourism Cluster	Cheung Chau Cultural and Heritage Museum
	Cheung Chau Cycling Lane
	Cheung Chau Night Market
	Cheung Chau Observatory Center
	Cheung Chau Sampan Rides Water Sports
	Cheung Chau Specilty Seafood Cuisine
	Cheung Chau Water Activities Training Center

Data Source: Lee, 2004

Taking Lantau Island as a tourism cluster, numerous smaller tourism clusters can be found (Figure 2.3). In a study “The Visitor and Tourism Study for Hong Kong” (VISTOUR) completed in 1995, the island was considered as a “Leisure Island” with the concentration of tourism resources (HKPD, 2001). Some of the clustering projects were further proposed in the Southwest New Territories (SWNT) Development Strategy Review in 2001. There were three major tourism and recreational clusters proposed on the island (Figure 2.3). First, the cluster on northeast Lantau (with Disneyland Resort) was suggested to provide major tourist and recreational facilities with various tourist attractions. Second, the cluster on northwest Lantau (connecting Tai O, Ngong Ping and Tung Chung) was planned to be the centre for cultural heritage and leisure activities. Third, the cluster on southern Lantau was proposed as an area

for ecological conservation and sustainable coastal recreation development. All these clusters were expected to be attractive to both local and international tourists with diversified attractions and experiences on the island. It was also believed that tourism resource on the island can thus be better utilized by clustering. A similar concept for development of Lantau Island was re-structured in the Lantau Concept Plan in 2004. If clustering of tourism resources and attractions is sustainable, will this be an advantage in promoting ST in Hong Kong?

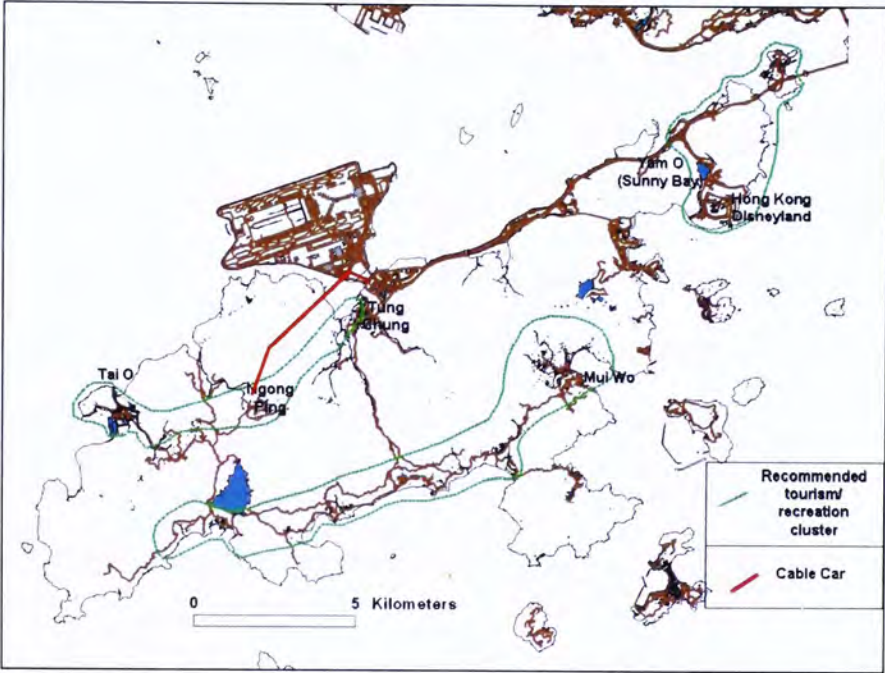


Figure 2.3 Tourism clusters on Lantau Island
(proposed in the SWNT Development Strategy Review)
Data Source: HKPD, 2001b

As emphasized in the Lantau Concept Plan, one of the planning principles for Lantau Island was “to enhance the visitor appeal of Ngong Ping based on its religious heritage and improved access by cable car” (HKPD, 2004). With the addition of Ngong Ping 360 Project and Wisdom Path, Ngong Ping has become a tourism cluster in the Lantau sub-region. With this concept in place, how can ST be developed on Lantau Island? What are the benefits to stakeholders, visitors, and indeed the local community? It is all these questions in mind that this research is initiated.

2.4.3 *Tourism study conducted on Lantau Island*

In spite of the rich tourism resource and opportunities on Lantau Island, limited tourism researches specifically on the island have been conducted. Cheng (1992) carried out a study on Lantau Island in response to the increasing development of the island. Instead of tourism development, the study focused on the balances of residential development, nature conservation, and outdoor recreation activities on Lantau Island (Cheng, 1992). Amatya (1995), on the other hand, investigated tourism planning in Hong Kong with a case study of Lantau Island. The study argued that the tourism planning on Lantau Island was not holistic and mostly ad hoc in nature (Amatya, 1995). The study highlighted the need for an integrated approach with sustainable environmental concept in tourism planning for Lantau Island. Subsequently, Yuen (1999) made use of the case of SWNT to study the potential for tourism in the non-urban areas of Hong Kong. Tourism planning and development in the region were found to be piecemeal. With the inclusion of Lantau Island in the region, sustainable way of tourism development was thus recommended (Yuen, 1999).

Other studies were not solely investigating tourism issues of Lantau Island or the region, individual attractions were examined (Ng, 1999; Chan, 2003a; Chan, 2003b; Kwee, 2005; Ho, 2006). Two of the most popular topics in discussion were the development of Hong Kong Disneyland and Tai O fishing village on the island as major attractions of Hong Kong.

As Hong Kong Disneyland is a newly opened attraction, various scholars (Chan, 2003a; Ho, 2006) were interested in its impacts on the tourism development of Hong Kong. Chan (2003a) interviewed 1,060 Hong Kong residents to identify the general perceptions of residents on the impact of Hong Kong Disneyland and its development. Also, Ho (2006) evaluated the impacts of Disneyland on the sustainable development

of Hong Kong's tourism industry. Recommendations were given to encourage more sustainable practices. These studies were helpful in providing supporting information for investigation in this research.

With increasing awareness on the importance of implementing ST development, Ng (1999) took Tai O fishing village as a case study to demonstrate the significance of considering local needs in ST planning in Hong Kong. Besides, Chan (2003b) used the case of Tai O to show the approach of community planning as a recommended strategy to promote and achieve ST. The suggestions made in the studies were believed to be useful in formulating ST strategies for Hong Kong.

From the foregoing, it is reviewed that there were small amount of tourism studies conducted on Lantau Island and Ngong Ping. However, none of the studies systematically studied concept and implementation of ST. In addition, no such studies studied Lantau Island as a tourism cluster destination. Taking into consideration the extension and importance of Ngong Ping, it was considered significant to carry out tourism study in the area. Detail description of the study areas would be illustrated in the following Chapter 3.

CHAPTER 3 STUDY AREA

As illustrated in the previous chapters, Lantau Island and Ngong Ping are chosen as the study areas in this research for the presence of infrastructures and tourism resources with uniqueness. Lantau Island is the biggest island in Hong Kong with total area of about 146 km². It is located at the western part of Hong Kong at the mouth of the Pearl River estuary (Figure 3.1). A variety of ecological, social, cultural, recreational and tourist resources can be found on the island. The island experiences rapid development and economically important infrastructures are being constructed in recent decades, such as The Hong Kong International Airport and The AsiaWorld-Expo and SkyCity. The Tung Chung New Town has been developed with increasing population and transport hub and logistic park are being proposed recently (HKPD, 2004). Appendix 2 summarizes the major recorded development on the island since 1900s. This chapter aims at introducing the details of Lantau Island with special attention to tourism resource inventory. The selected destination, Ngong Ping, for survey is also described in this chapter.

To make suitable strategies and planning for ST development, it is vital to understand the assets of the region. Therefore, an inventory indicating tourism resources of Lantau Island was made to explore the potentials and weaknesses of the island for ST development.

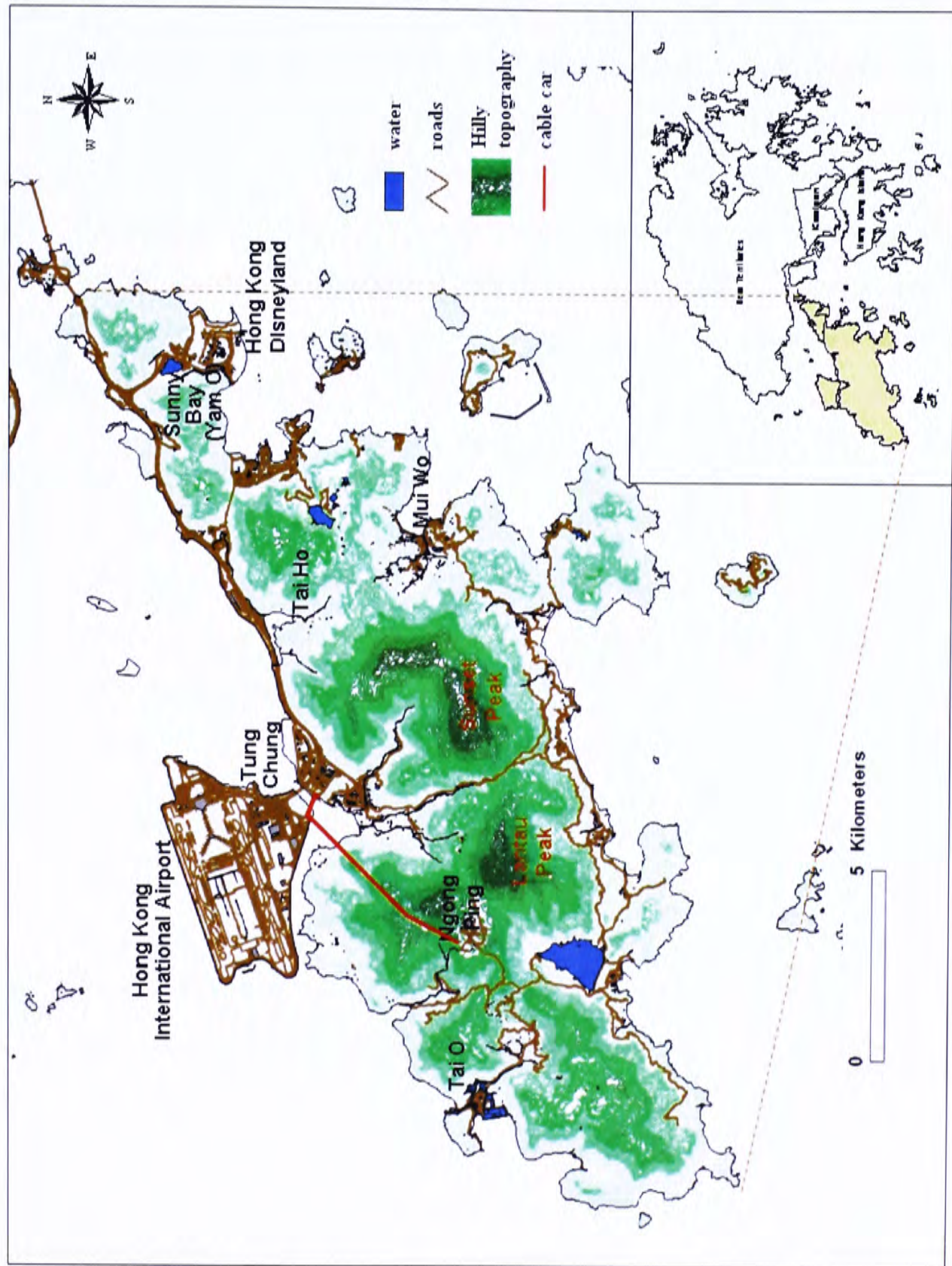


Figure 3.1 Map of Lantau Island

3.1 Inventory of Lantau Island

Tourism resources can be divided into groups and more recently, Deng *et al.* (2002) and Wen and Keith (2003) used the analytic hierarchy process (AHP) to provide an inventory and classification (Refer to Figure 4.1 in Chapter 4). The resource were generally divided into three major components and further subdivided into sub-group for clear description. Borrowing from this AHP, the detail of each component of tourism resources on Lantau Island were identified and shown in tables for easier understanding.

3.1.1 Resources and attractions

Resources and attraction can be broadly divided into categories of natural and cultural. For natural resources, it mainly includes landscape, river, flora and fauna (Table 3.1 and Appendix 3). There are a total of about 26 named-hills with a height of more than 300m found on the Lantau Island. The highest peak on the island is the Lantau Peak (934m), which is also the second highest peak in Hong Kong.

With regard to water resources on Lantau Island, there are many rivers and streams running along the undulating landscape. One of the invaluable rivers is the Tai Ho Stream which has the highest freshwater fish species recorded in Hong Kong (WWF, 2000). More than 46 fish species have been found in the stream, and it was designated as Site of Special Scientific Interest (SSSI) with high ecologically value (Kilburn, 2001). In addition, Tung Chung Stream together with Tai Ho Stream shows a record of a combined total of 57 different fish species. It is also one of the only two sites on Lantau that the locally rare Crested Kingfisher *Ceryle lugubris* has been recorded (GLA *et al.*, 1998). Other streams like Keung Shan Stream, Ngong Ping Stream, etc. are also sites for some of the rare fish species.

Table 3.1 Natural resources on Lantau Island

NATURAL RESOURCES*				
Mountain (500m or above)		Major Rivers	Flora	Fauna
Name	Height (m)			
Lantau Peak (Fung Wong Shan)	934	Tai Ho Stream	Medicinal Herbs	Birds
Sunset Peak (Tai Tung Shan)	869	Tung Chung River	Orchids	Butterflies
Lin Fa Shan	766	Wo Lung Hang	Poisonous plants	Dragonflies
Nei Lak Shan	751	Tai O Chung	Rare plants	Mammals
Yi Tung Shan	747	Silver River	Fungus	Amphibians and Reptiles
Kau Nga Ling	548	Keung Shan Stream	Fruit crops	
Po To Yan	529	Ngong Ping Stream	Vegetable crops	
		Sunset Peak Stream		
		Wong Lung River		
		Man Cheng Po		

* Appendix 3 provides more details for each category

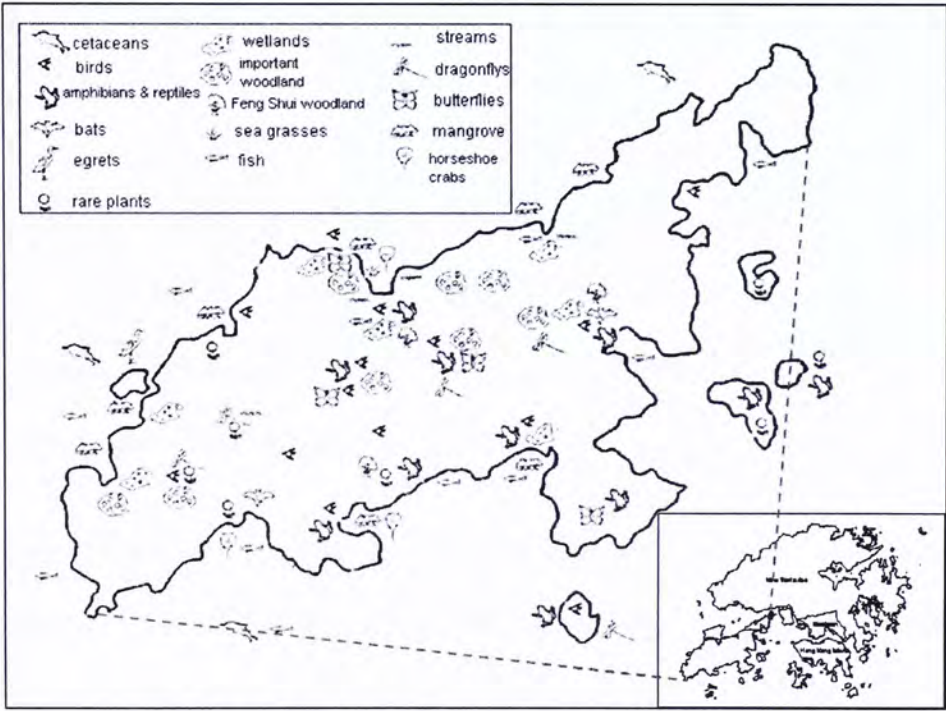


Figure 3.2 Biodiversity resources on Lantau Island

Source: GLA, 1998

In addition, there are great biodiversity resources on Lantau Island as shown in Figure 3.2. As most of the area of Lantau Island is within the boundaries of Country Park, large variety of flora and fauna are better preserved. The flora species of the island include medical herbs, orchids, poisonous plants, rare plants, fungus, fruit crops and vegetable crops. Common species like Hong Kong Gordonia (*Gordonia axillaris*), *Rhododendrons* and *Azaleas*, *Schima* (*Schima superba*), Chinese Alangium (*Alangium chinese*), Wax Tree (*Rhus succedanea*), Uvaria (*Uvaria macrophylla*) and Hong Kong Asarum (*Asarum hongkongense*) can all be found on Lantau (AFCD, 2006a). In addition, *Gmelina chinensis* has been listed in Illustration of Rare and Endangered Plants in Guangdong Province showing its value for conservation.

Fauna species like bird, butterflies, dragonflies, mammals, amphibians and reptiles can be easily found across the island. According to the records, there are hundreds of species of resident and migratory birds plus resident colonies of bats (Peng, 2003). For butterflies' species, there are more than 120 species belonging to 9 families, representing 55% of all the species found in Hong Kong. Moreover, 63 of the 110 recorded species of dragonflies, representing more than 60% of total species for Hong Kong are also discovered. 70% of all locally recorded amphibians and reptiles in HK can be found on Lantau (Peng, 2003). All these records have proven the ecological richness of the island.

Apart from natural resources, cultural resources are also essential for ST development. Cultural resources include community, architecture, religion and historical relics and resources. Table 3.2 and Appendix 4 provide the details of selected cultural resources on Lantau Island. The population of Lantau is about 88,000 (HKPD, 2001b). The communities can be broadly divided into six namely Mui Wo, Discovery Bay, Tung Chung, Tai O, South Lantau and other parts. Most of the

population is concentrated at the Tung Chung New Town. Each community has its features and both modern and traditional cultures of Hong Kong can be seen in these communities.

Some of the architectures on the island are special, depicting long history. The old police station at Shek Tsai Po is of both architectural and historical value. It could be turned to an attractive tourist spot when it is well preserved and refurbished. Most other architectural buildings are temples. They show the architectural skills of people hundreds of years ago. As most of the people on the island believed in Confucianism, Taoism and Buddhism in the past, most of the religious buildings belong to temples or monasteries bearing these denominations.

Table 3.2 Cultural resources on Lantau Island

CULTURAL RESOURCES*			
<i>Major communities</i>	<i>Architectures</i>	<i>Religion</i>	<i>Declared Monuments</i>
Mui Wo	Tin Hau Temple in Tung Chung	Tin Hau Temple	Rock Caving in Shek Pik
Discovery Bay	Hau Wong Temple in Tung Chung	Hung Shing Temple	Tung Chung Fort
Tung Chung	Ba Kong Temple in Sha Lo Wan	Ba Kong Temple	Fan Lau Fort
Tai O	Man Mo Temple in Mui Wo	Hau Wong Temple	Stone Circle in Fan Lau
South Lantau	Yeung Hau Temple in Tai O	Yeung Hau Temple	Tung Chung Battery
	Temple of King Kwan in Tai O	Kun Yam Temple	
	Tin Hau Temple in Tai O Village	Temple of King Kwan	
	Shek Tsai Po Hung Shing Temple in Tai O	Man Mo Temple	
	Shek Tsai Po Old Police Station in Tai O	Temple of Three Kings	
	Tin Hau Temple in Fan Lau	Pak Tai Temple	

*Appendix 4 provides more details for each category

Among different cultural resources found on Lantau, the declared monuments are found to be special and interesting. The Fan Lau Fort and the Stone Circle in Fan Lau

are distinctive. They are located at the south-western of Lantau capturing the outstanding scenery of the Pearl River Estuary.

The abundant natural and cultural attractions on Lantau Island have provided lots of opportunities for tourism development. Table 3.3 and Figure 3.3 summarizes the major attractions on the island. Some natural attractions like beaches and country trails can attract hundreds of visitors or hikers to enjoy the natural beauty of Lantau everyday (HKEPD, 2006). Regarding to cultural attractions, Tai O village, Po Lin Monastery and The Big Buddha are some of the most famous attractions of Lantau Island. Millions of tourists all over the world are attracted to visit them for their uniqueness. It shows their importance to the sustainability of the local culture as well as economic and tourism developments.

Recently, new attractions have been built to boost the down-turning economy of Hong Kong. The Hong Kong Disneyland Resort and the Ngong Ping 360 Project are two of the new attractions built on the island in the early 21st century. They provide different excitement and experiences to tourists on the island.

Table 3.3 Major attractions on Lantau Island

Attractions					
<i>Natural</i>	*Code	<i>Cultural and heritage</i>	*Code	<i>Purpose-built</i>	*Code
Cheung Sha Beach	1	Fan Lau Fort	8	Asia World Expo	14
Lantau Peak	2	Mui Wo old watch tower	9	Hong Kong Disneyland	15
Mui Wo wetland	3	Po Lin Monastery	10	Ngong Ping 360	16
Pui O Beach	4	Tai O village	11	Shek Pik Reservoir	17
Pui O wetland	5	The Big Buddha	12	Wisdom Path	18
Silvermine cave	6	Tung Chung Fort	13		
Tong Fok Beach	7				
<i>Nature Trail</i>	#App. 5				
Ngong Ping Fun Walk	Figure A5.1				
<i>Long Distance Hiking Trail</i>					
Lantau Trail	Figure A5.2				
<i>Country Trail</i>					
Chi Ma Wan Country Trail	Figure A5.3				
Fan Lau Country Trail	Figure A5.4				
Keung Shan Country Trail	Figure A5.5				
Shek Pik Country Trail	Figure A5.6				
South Lantau Country Trail	Figure A5.7				
Tei Tong Tsai Country Trail	Figure A5.8				
Wong Lung Hang Country Trail	Figure A5.9				
<i>Tree Walk</i>					
Nam Shan Tree Walk	Figure A5.10				

*Refer to Figure 3.3 for the locations. #Refer to Appendix 5 for the routes.

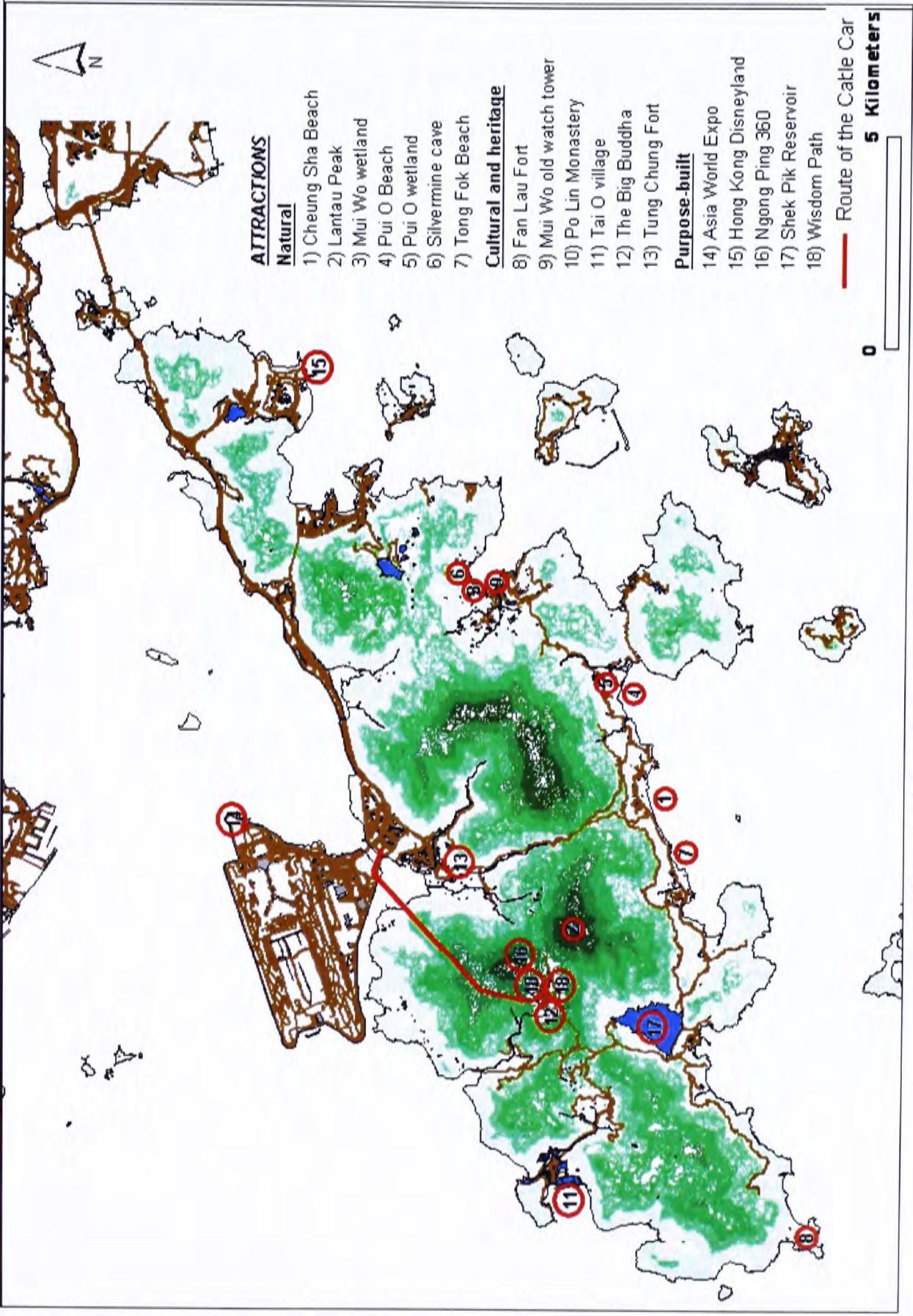


Figure 3.3 Selected major attractions on Lantau Island

3.1.2 *Capital*

Capital includes facilities, infrastructures and accessibility. Facilities related to the recreational and tourist facilities that provide hospitality and retail services. There are 5 hotels⁴ and 9 hostels on the island. They are mainly located at the tourist spots area like the Hong Kong Disneyland, Tung Chung, etc. with more than 3,000 rooms offered. In addition, there are at least 120 restaurants with various kinds of services provided on Lantau Island.

Infrastructures including the Hong Kong International Airport are well-developed on the island for the sake of further development. Transportation networks have been greatly improved in recent years increasing accessibility to and within the island. While the island is accessible by the airport express, MTR, bus, taxi and car services from other parts of Hong Kong, internal transportation within the island is limited to a few major roads for cars crossing between most of the residential and touristic areas of the island. As the island has an undulating terrain and most part of the island is categorized as conservation area for the Lantau Country Parks, main roads are constructed along the narrow coastal belt of land. The North Lantau Highway is the major road in the north linking between the Airport and Lantau Island. In the south, the South Lantau Road or Tai O Road connecting Mui Wo in the east and Ngong Ping and Tai O in the west provides local linkage between east and west (HKPD, 2001b).

Other than transportation, communication networks are essential. The Airport district and most of the residential areas like Tung Chung and Discovery Bay are already under the mobile network coverage. Four of the 6 mobile network operators in

⁴ Silvermine Beach Hotel in Silvermine Bay, Regal Airport Hotel in the HK International Airport, Disney's Hollywood Hotel and HK Disneyland Hotel in The HK Disneyland, Novotel Citygate HK in Tung Chung

Hong Kong have extended their mobile network coverage to the Country Park areas and most of the Lantau Island⁵ (OFTA, 2006).

With the increasing number of visitors to Lantau, the treatments of increasing amount of sewage and wastes should be taken into consideration. There are 6 sewage treatment plants on the Lantau Island. Four of them are small secondary treatment work; another is chemically enhanced primary work while the other one is primary treatment plant (DSD, 2006). Besides, a pilot scheme of reclaimed water usage in the Ngong Ping Sewage Treatment Works (NPSTW), which is a tertiary treatment plant, has been introduced in 2005 to test for new water resource for sustainable development. The reclaimed water produced by NPSTW is mainly used for toilet flushing in nearby public toilets, toilets in the Ngong Ping Cable Car Terminal and related tourism facilities (DSD, 2006).

3.1.3 Policies and planning

Most of the tourism planning and policies are in a macro scale for Hong Kong while the specific planning for sub-region tourism development should also be emphasized. With the introduction of more development projects on Lantau Island, tourism development on the island has become a major issue. Based on the Southwest New Territories⁶ (SWNT) Development Strategy Review (DSR) initiated in 1990, the Planning Department recommended another development strategy in 1998 for the sub-region up to year 2016 (HKPD, 2001b). Final report of the SWNT DSR: Recommended Development Strategy (RDS) was released in 2001.

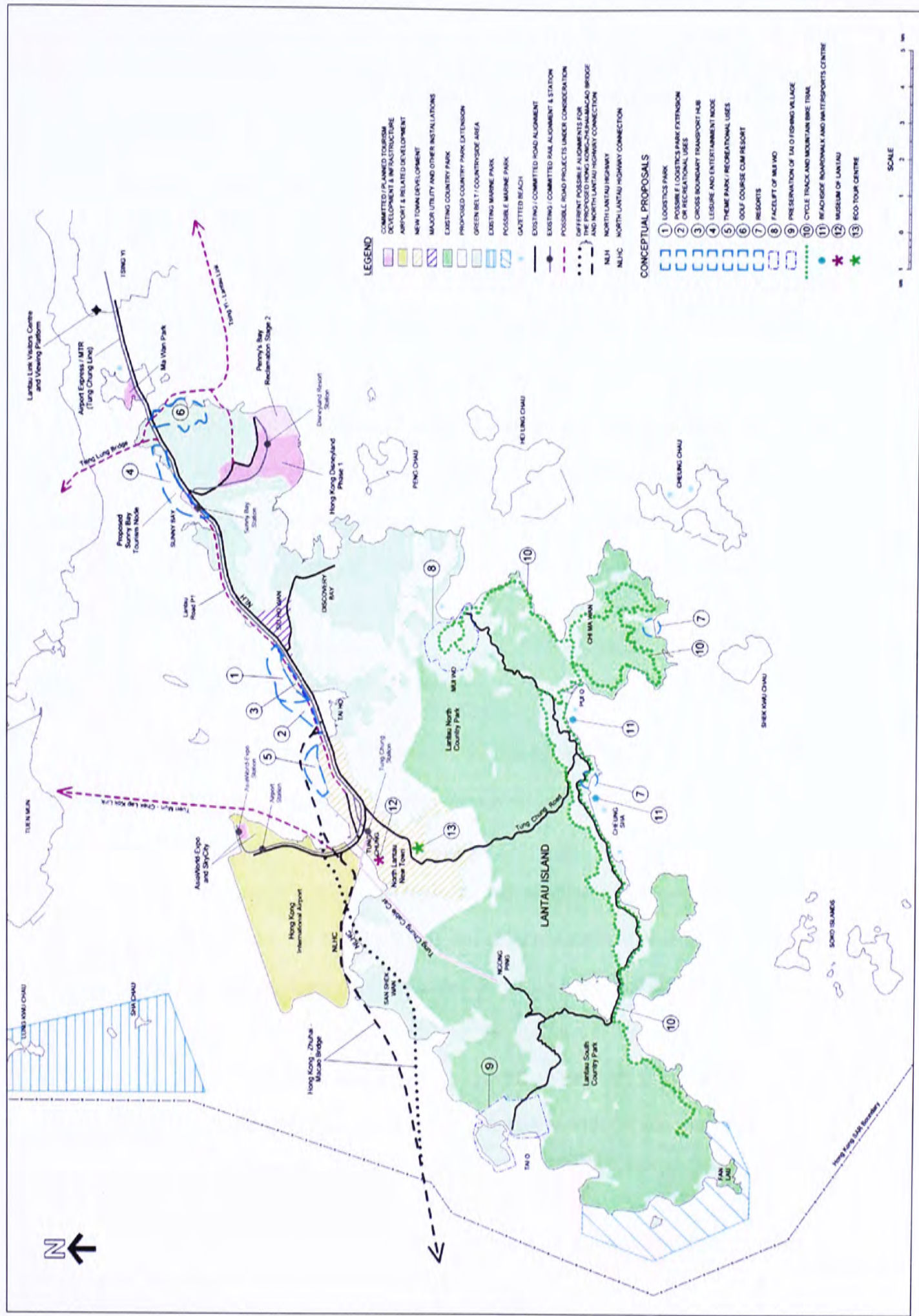
There were four major planning principles suggested in the RDS (HKPD, 2001b):

⁵ Lung Mei Tsuen, Wong Lung Hang, Ngong Ping, Keung Shan, Tai O, Lantau Trail near Shui Hau, Tong Funk, Cheung Sha, Pui O, Nam Shan Camp

⁶ SWNT includes mainly Lantau Island, Lamma, Cheung Chau, Peng Chau and other outlying islands.

(1) capitalizing tourist and recreation opportunities; (2) conserving the high quality natural environment and cultural heritage; (3) accommodating an appropriate share of the territory's population growth; and (4) promoting the economic development of the territory. One of the major recommendations was the identification of four tourist and recreation clusters in SWNT which was proposed as a centre for tourism, recreation and leisure (HKPD, 2001b). Three out of four tourism clusters identified are found on Lantau Island (Refer to Figure 2.2 in Chapter 2). They are the clusters on (1) Northeast Lantau including Penny's Bay, Sunny Bay and Ma Wan; (2) Northwest Lantau including Tung Chung, Ngong Ping and Tai O; and (3) South Lantau including Mui Wo and South Lantau Coast. It revealed the potential and importance of Lantau Island for tourism development.

In 2004, there was the proposal of another planning especially for Lantau Island: Concept Plan for Lantau Island (Figure 3.4). It aimed to *"provide an overall planning framework to ensure a balanced and coordinated approach for the proposed developments while meeting the nature conservation needs"* (HKPD website, 2004). The Lantau Development Task Force was set up in February 2004 to provide a high-level policy steer on the economic and infrastructure development on Lantau Island.



In the Concept Plan for Lantau Island, 3 out of 4 development themes proposed are related to the realization of tourism and recreational potential. They include (1) Economic infrastructure and tourism; (2) Theme attractions based on heritage, local character and natural landscape; and (3) Maximizing the recreation potential of Country Parks (HKPD, 2004). It is clear that the government intends to explore and develop Lantau Island as an island for clustering of tourism and recreational activities. The concept plan proposal encompasses the construction of logistics park, theme park, marine park, golf course, resort facilities, water-sports center museums, cycle tracks, eco and heritage trails, etc. With a preliminary sustainability assessment by the government, all those suggestions were claimed to be beneficial to the economic development, environmental conservation, cultural and heritage preservation of Lantau Island as well as Hong Kong.

3.2 The Ngong Ping tourism cluster

Among the various destinations on Lantau Island, Ngong Ping was chosen for this study. Ngong Ping was selected as it was one of the key destinations boosted by the HKTB in 2006 with the opening of Ngong Ping 360. In the decades before 1990s, Ngong Ping was a rural area with scattered temples and a site for hiking. The construction of the Big Buddha Statue raised its reputation to visitors. Since the late 1990s, Ngong Ping was recognized as one of the key tourist attractions in the territory, with complementary attractions and improved facilities to enhance the area's appeal to both local and international tourists (HKPD, 2006). With the addition of new attractions, Ngong Ping has become a tourism cluster with the concentration of tourist resources and attractions.

Ngong Ping is a plateau with a total area of about 102 hectares, located on

Lantau Island, about 3.5 km to the southwest of Tung Chung and 20 km to the west of Mui Wo (HKPD, 2006). It is situated between the Lantau South and Lantau North Country Park, and surrounded by mountain ranges including Nei Lak Shan, Lantau Peak, Muk Yue Shan and Sze Tsz Tau Shan (Figure 3.5).

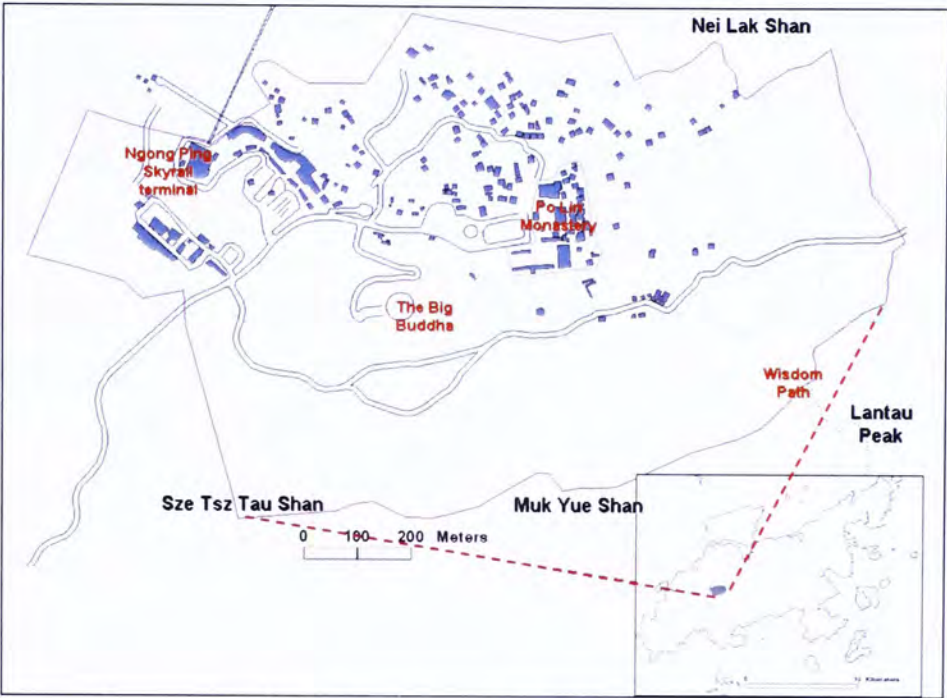


Figure 3.5 Map of Ngong Ping area

Ngong Ping is environmentally and ecologically sensitive. Most of the hill slopes in the area are covered with extensive grassland, shrub and forests. In addition, there are several small streams running from the southeast to northeast. The stream courses and woodland area are the major breeding habitats for a protected species - Romer's Tree Frog in Hong Kong (Lau, 2003). Hence, it was designated as a "Site of Special Scientific Interest" (SSSI).

In addition to the outstanding natural scenery of Ngong Ping, the unique religious heritage provides a peaceful and spiritual atmosphere. The major constructions in the area are associated with religious institutions. The Tian Tan

Buddha (Big Buddha) Statue and Po Lin Monastery are the two most famous and dominating religious heritage in Ngong Ping. Besides, there is a recognized village of Ngong Ping, which is informally divided into two parts namely (1) the home of Buddhist and (2) the home of laymen. The home of Buddhist is the area near and surrounding the Po Lin Monastery with majority of monks and nuns residents. The home of laymen refers to the area near public bus terminus and Ngong Ping 360. Some other small temples, domestic dwellings, a disused paddock, a youth hostel and some agricultural land can also be found on the slopes (HKPD, 2005a). As the area was not originally designed for high population, there were only about 110 residents in total (CSD, 2002).

Concerning the connection between Ngong Ping and other parts of the island, Ngong Ping Road was the only vehicular access to the area. As the road connecting to the restricted Tung Chung Road is narrow and winding, franchised bus and taxi services provide the major road transport. It takes about 45 minutes from Tung Chung to Ngong Ping by bus. When the Cable Car connecting Tung Chung and Ngong Ping began to operate, the traveling time between the two areas shortened to about 20 minutes.

3.2.1 Tourist attractions

Ngong Ping was selected specifically as the study area as major cluster of tourist attractions can be found in the vicinity. There are four attractions (Figure 3.6) promoted by the HKTB both in Hong Kong and overseas. They are (1) Po Lin Monastery, (2) The Big Buddha, (3) Ngong Ping 360, and (4) Wisdom Path. All of them are related to the unique religious and cultural background of Ngong Ping that provides a “Journey of Enlightenment” for visitors. Some of them have high historical values while some others are newly constructed to enhance the attractiveness of

Ngong Ping. Each of them is described in detail in the following sections.

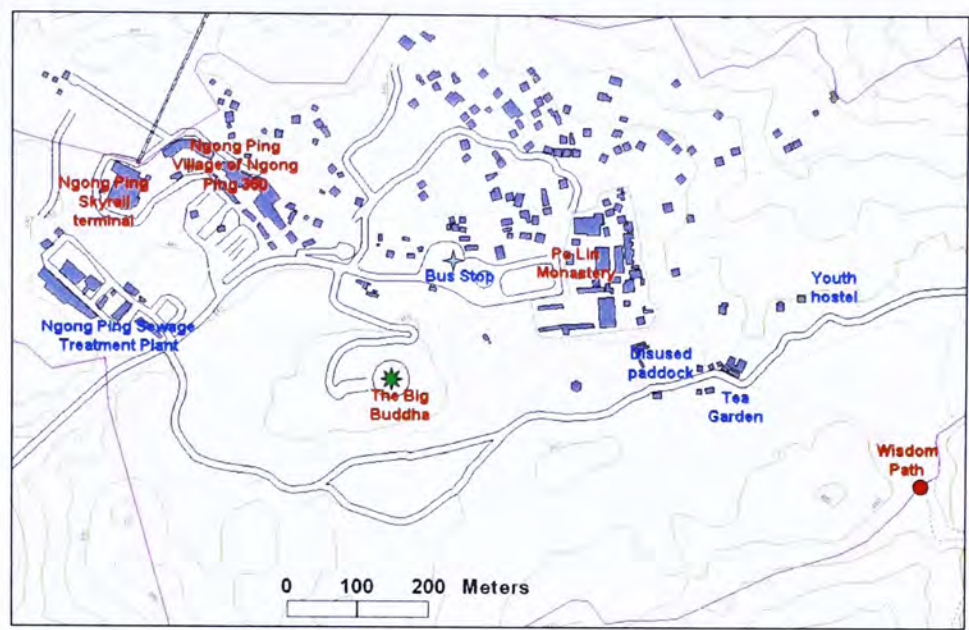


Figure 3.6 Location of attractions in Ngong Ping

3.2.1.1 Po Lin Monastery

The Po Lin Monastery (Figure 3.7) can be considered as the source of attraction and development in Ngong Ping. It was initially named as the “Big Hut” and constructed by Zen masters Da Yue, Dun Xiu and Yue Ming in Ngong Ping in 1906 (PLM, 2004). It is located on the Ngong Ping plateau and nestled between the Lantau Peak and Lei Nak Peak. It is surrounded by The Big Buddha on the west, Lotus Pagoda and Hua Yan Pagoda on the south and Lotus Hill and Lion Rock on the north.

The monastery comprises of more than fifteen buildings and constructions. Major constructions include Tian Tan Buddha Statue (The Big Buddha), Tei Tan and The Gate, Hall of Great Hero, Welto Temple, Po Lin Hall, Po Lin Pond, etc. Among them, The Hall of Great Hero and The Big Buddha are the most famous attractions. Moreover, a bronze Cauldron was created and placed in the Tei Tan Square in 1998 to commemorate the establishment of Hong Kong Special Administrative Region with Hong Kong returned to its motherland on 1st July 1997. It is named as The Splendid

Bronze Cauldron for Return of Sovereignty. As most of the constructions were not initially built for the sake of tourism development, detailed descriptions are often absent.

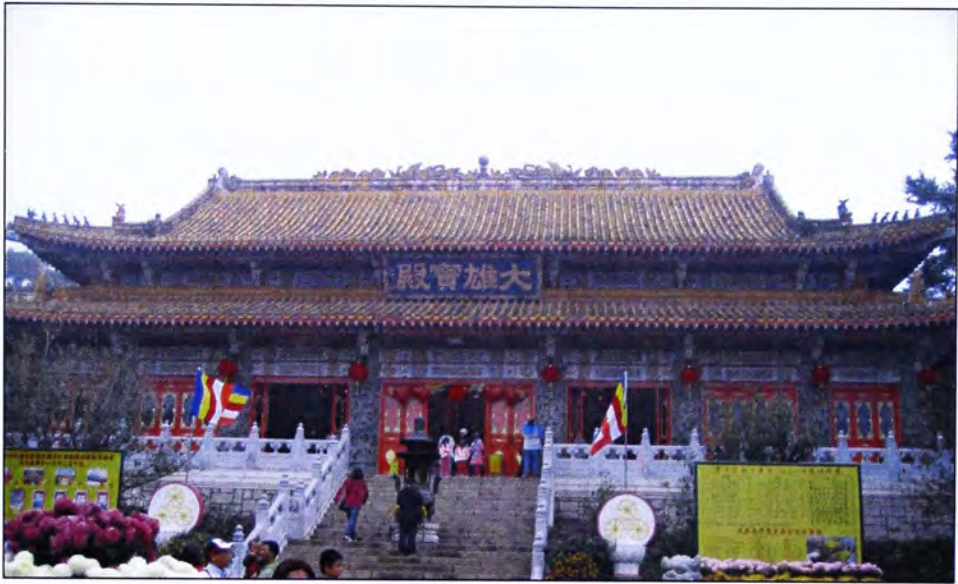


Figure 3.7 Po Lin Monastery

With history of over one century, Po Lin Monastery has experienced various changes. Other than the addition of buildings and constructions, it became a famous attraction instead of solely a monastery for dissemination of Buddhism. It was originally established for the monks to carry out spiritual practice or Zen meditation. It is also devoted to carry out missionary work in the community with the establishment of schools and homes for the aged in remote areas. With the increasing number of believers and the construction of the Big Buddha as a new landmark of Hong Kong, growing number of tourists are attracted to the monastery. Vegetarian restaurants, snack bar, stores for souvenirs, exhibition hall, etc. were also built to accommodate the tourism growth. Expansion works with the construction of Ten Thousand Buddhist Pagoda has commenced and are expected to finish in 2009.

3.2.1.2 *The Big Buddha*

The Big Buddha (Figure 3.8) is the world's tallest outdoor seated bronze statue of the Buddha known as Tian Tan Buddha (PLM, 2004). It is situated on the Muk Yue Peak in front of the Po Lin Monastery. Reversed from the direction of most of the Buddha statues in the Mainland, the Big Buddha sits in the South and faces the North but slightly towards the East to face Beijing which is the motherland of Hong Kong. It is the marriage of religious culture and sculpture, and symbolizes the harmonious relationship between man and nature, people and region.

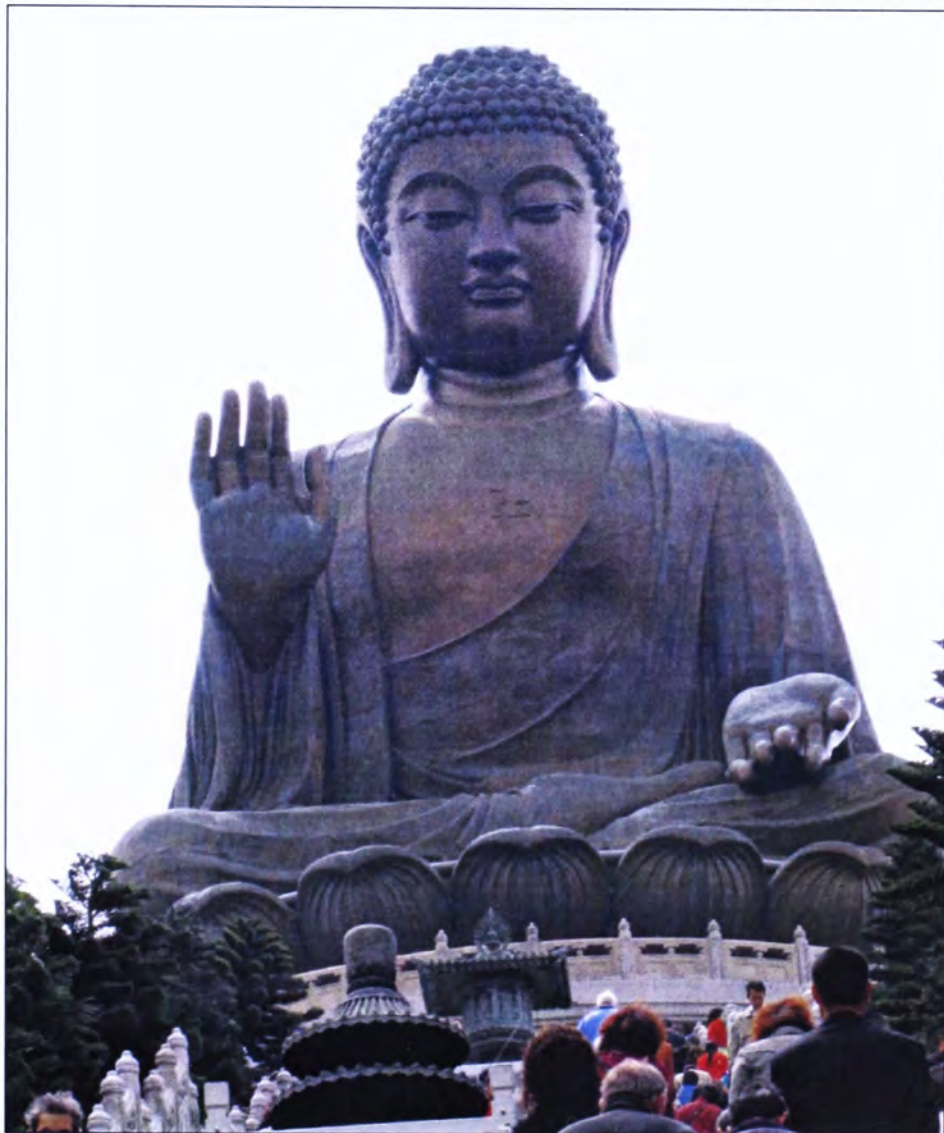


Figure 3.8 The Big Buddha

The coordination work for construction of the Big Buddha began in 1976. With more than a decade of construction, it was eventually finished and the Buddha was opened for visit on 29th December 1993. After climbing up the 268 steps, visitors can enjoy the panoramic view of Ngong Ping and visit three halls inside the statue. The total area of the three halls is 2,239 square meters with some characters of Buddhism displayed. Indeed, each part of the design of the Big Buddha statue including the eyes, the smile, the fingers, the hands, etc. symbolizes unique meaning.

Because of the gigantic size and magnificent image of the Big Buddha together with the Po Lin Monastery, it has attracted about 10 million visitors since 1993 (Anonymous, 2006a). In spite of the decreasing number of visit, it has also attracted 4-7% of total visitors' arrival of Hong Kong in 2001-2005 (Figure 3.9) (HKTb, 2006). This reflects the attractiveness and importance of The Big Buddha and its contribution made to the tourism industry of Hong Kong.

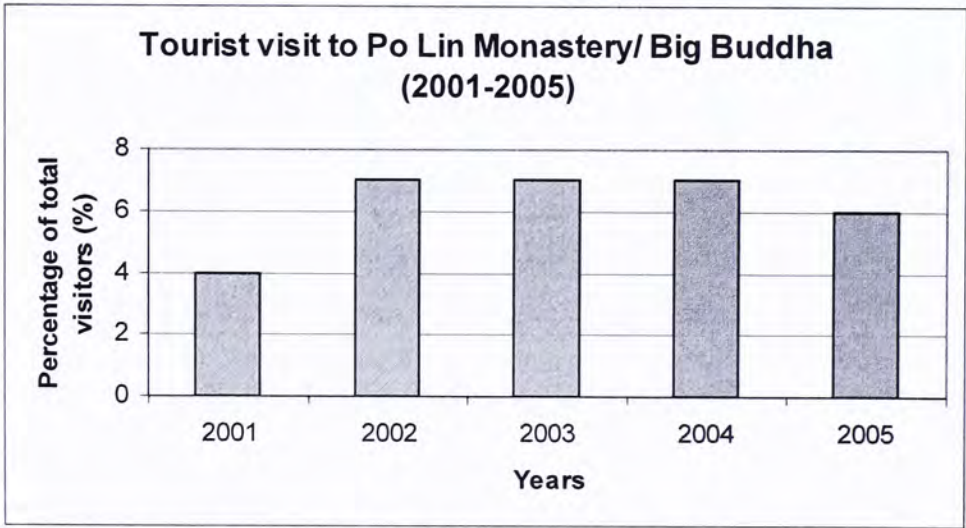


Figure 3.9 Tourist visit to Po Lin Monastery/ Big Buddha in 2001-2005
Data Source: HKTb, 2006

3.2.1.3 Ngong Ping 360

Ngong Ping 360 is a tourism attraction newly opened in September 2006. It

consists of a 5.7km cable car – Ngong Ping Skyrail, and a cultural themed village – Ngong Ping Village. It is developed and financed by the Mass Transit Railway Corporation (MTRC) but operated by Skyrail-ITM (Hong Kong) Limited with a joint venture tender for the project (Skyrail-ITM, 2006). The purpose of the project was to complement the existing attractions in Ngong Ping and further enhance the region as a major tourist destination in Hong Kong (LC, 2006). It is hence highly promoted by the HKTb as one of the “must-go” tourism destinations in Hong Kong since 2006.

Ngong Ping Skyrail (Figure 3.10) runs between Tung Chung and Ngong Ping. It is the major promotion of the whole project. 112 cabins with a total carrying capacity of 3,500 passengers per hour in each direction are provided. It takes about 20-25 minutes for the journey providing a bird’s eye view of the mountainous terrain of Lantau Island. Visitors can enjoy the scenery of Tung Chung new town and the international airport, as well as peaceful Country Park environment on the cable car journey.

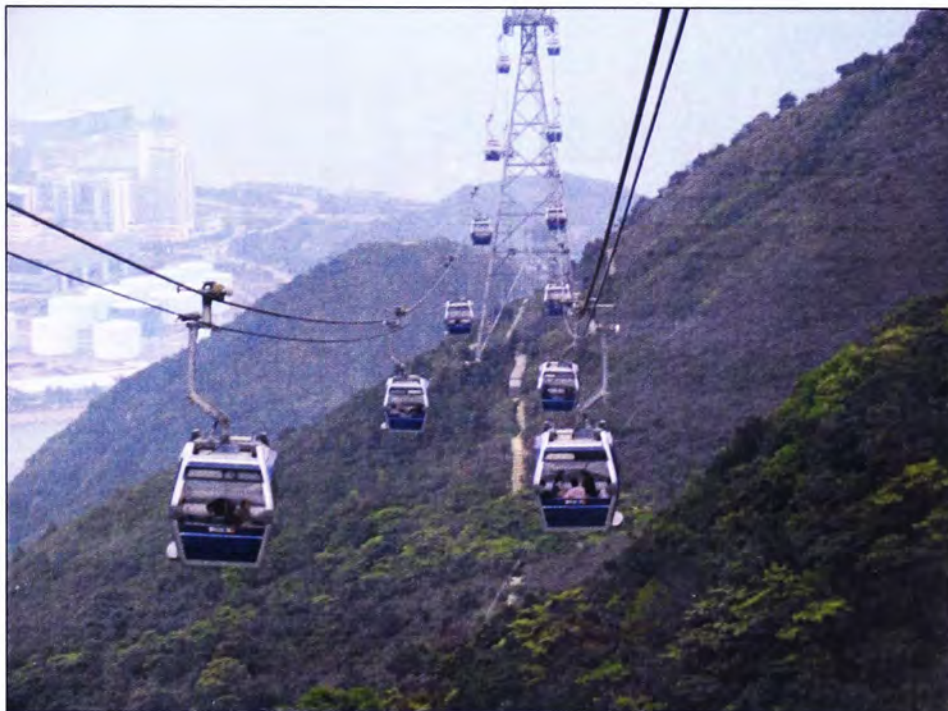


Figure 3.10 Ngong Ping Skyrail

In addition to the cable car, a 1.5 hectare cultural themed village known as Ngong Ping Village (Figure 3.11) is set in Ngong Ping adjacent to the Skyrail's Ngong Ping Terminal (Figure 3.12). Buildings of the village were specially designed to reflect and incorporate with the religious characteristics of Ngong Ping. The Village comprises of variety of dinning or retail shops, and several major attractions – Walking with Buddha, Monkey's Tale Theatre, and the Ngong Ping Tea House. The Ngong Ping Tea House allows tourists to enjoy and explore the traditional Chinese tea culture, while the other two attractions attempt to display the Buddhist stories in an entertaining way that caters for all types of tourists.



Figure 3.11 Ngong Ping Village



Figure 3.12 Schematic map of the Ngong Ping 360 Project
Source: MTRC, 2006

3.2.1.4 *Wisdom Path*

Wisdom Path (Figure 3.13) is the world's largest outdoor wood inscription of Buddhist teachings erected on a natural grassy slope near Lantau Trail with a total area of about 3,500 square meters. The carving was transformed from the calligraphy of "Prajna Paramita Hrdaya Sutra" (Heart Sutra) from Professor Jao Tsung-I, an internationally well-known master with outstanding achievements in both academic research and art (TC, 2006). It is made of 38 timber columns which are specially imported from Central Africa and known as African Rosewood. Heart Sutra is the best known Mahayana sutra with 260 words that summarizes the essence of the Perfection of Wisdom of the Buddha (TC, 2006). To show the profound wisdom of the Heart Sutra, the timbers have been arranged in a figure-of-eight configuration (i.e. the symbol of infinity " ∞ ") symbolizing infinity.



Figure 3.13 Wisdom Path

As the location of the attraction is within the conservation area of Ngong Ping, environmental impact assessment has been undertaken to ensure the construction would not make significant damage on the environment. Spending three years of planning and six months of construction which cost \$9.5 million, it was eventually opened in May 2005.

CHAPTER 4 METHODOLOGY

Adhering to the objectives of this research, a variety of methods has been used to get relevant information for investigation and analysis. Both primary and secondary materials have been adopted to make objective examinations and appropriate judgment. This chapter aims at describing the methods employed and the rationales for adopting corresponding methods.

4.1 Tourism Rapid Assessment (TRA)

The overall framework of methodology is modified from the Tourism Rapid Assessment (TRA) tool. TRA is “*designed for a multidisciplinary team and local participants to perform a rapid assessment and analysis of a tourism destination*” (Dunn and Hurdus’s website, 2004). It is originally designed to assess nature-based tourism in rural communities and cultural heritage tourism in urban communities. It takes into account mass tourism while primarily focusing on smaller scale tourism (Dunn and Hurdus, 2004). It can be used for policy debates, for planning and implementing tourism development, etc. It is found to be comprehensive in evaluation within a short period of time as it involves multidisciplinary assessments. However, TRA is simplified to perform rapid assessment of the study area in this research by employing a small group of helpers and local participants, instead of a multidisciplinary team.

TRA is considered to be useful in fostering tourism stakeholder to participate and collaborate in the sustainable development of the destination (Lamoureux, 2002; PCU, 2003; Hawkins, 2004b). It was being tested in both Ghana and Niger and considered to be applicable (Lamoureux, 2002). With the recognition on the importance of involvement by tourism stakeholders, TRA is therefore borrowed and simplified for

investigation in this research.

TRA collects both primary and secondary materials for analysis. Table 4.1 summarizes the methods employed with respect to the corresponding objectives of the study. Secondary data is collected for this research from media materials, government planning or development documents, academic research papers or literature, annual reports by tourism organizations, etc. Most of these are useful in providing background information for the research. They can also reveal the present tourism policies and development in Hong Kong and on Lantau Island.

Table 4.1 Summary of methodologies

	Objectives	Contents	Methodologies
1)	To review current policies, planning and development of tourism in Hong Kong, especially on Lantau Island	Tourism policies, planning and development of Hong Kong and Lantau Island	Literature Review
2)	To investigate and assess potentials and limitations for the development of ST on Lantau Island	The Strengths (S), Weaknesses (W), Opportunities (O) and Threats (T) of Lantau Island for ST development	SWOT analysis Closed-quantitative interview and open-ended interviews with stakeholders
3)	To evaluate the performance of the tourism cluster in Ngong Ping in the context of ST	Contribution of the tourism cluster in Ngong Ping to tourism sustainability	Structured questionnaire survey with tourists in Ngong Ping Semi-structured interviews (interview guide approach) with local communities
4)	To recommend and formulate strategies for ST development	Suggestion for improvement on ST development in Hong Kong	Recommendations and strategies derived from the results

Primary materials are often indispensable in most research and assessment. Questionnaire survey and semi-structured interviews are commonly used and were also used in this research. Semi-structured interviews were conducted with the tourism stakeholders including tourism officials of government departments,

developers of tourist attractions, green groups and the local communities. In addition, local communities were interviewed. Questionnaire surveys were conducted with tourists in the study area. The details and formats of interviews and survey will be described in the following parts.

In addition, field observation, a core aspect of geographical research, was systematically articulated in realizing the actual situation of the study area. Several field studies (from February 2006 to March 2007) were undertaken at selected sites of Lantau Island and the primary study area, Ngong Ping. The field trips undertaken are helpful in making resource inventory and experiencing some special events and service quality performance of tourist attractions relevant to the objectives of the study.

4.2 Hierarchical structure of tourism resources inventory of Lantau Island

In order to investigate the potentials and limitations of Lantau Island as a destination for development of sustainable tourism (ST), the identification of existing tourism resources on Lantau Island is essential. Thus, a tourism resource inventory of Lantau Island was established in a hierarchical structure for ease of evaluation (Figure 4.1).

Tourism resource inventory is designed to provide strategic information for planning and development and is divided into two components. The first one describes the existing tourism resources and facilities use, while the second one illustrates the potential of tourism resource for future use. To have a detail and comprehensive description of tourism resource inventory, huge amount of data are required from various government departments and stakeholders. In addition, field observation and investigation is therefore indispensable. With limited time and

resources, tourism resource inventory of Lantau Island for this study can only provide a general overview of existing tourism resources and facilities. It is believed that the information collected for the inventory is useful in assisting investigations for this study.

To establish a hierarchy structure of tourism resources, it is important to identify some components or variables for further investigation. Many scholars (Wu *et al.*, 1992; Yang and Chu, 1994; Deng *et al.*, 2002; Li and Dewar, 2003) have proposed various elements or components for the purpose of tourism resource evaluation. Wu *et al.* (1992), for example, identified seven key elements for investigation namely: mountains, landscape, water, forest environment, wildlife, plants and cultural heritage. Li and Dewar (2003) chose three key variables to examine tourism development of the destination: tourism resources and attractions, infrastructure, and government policies. Yang (1994) and Chu (reported in Bao and Chu, 1999), on the other hand, used analytic hierarchy process (AHP) approach for evaluation. Deng *et al.* (2002) carried out another evaluation for natural attractions with reference to the above researchers. Deng *et al.* (2002) selected five major components as contributing to the overall attractiveness of the destination: tourism resources, tourist facilities, accessibility, local communities and peripheral attractions. The five components are then subdivided into twelve sub-categories. Some of those subdivisions require further divisions. For example, the tourism resources category was divided into natural and cultural resources. The natural resource category subdivided into environmental factor (including sanitation, comfort and security); and physical factors (including climatic phenomena, water, mountain, fauna and flora) (Deng *et al.*, 2002).

Drawing upon the above literatures, a hierarchical structure for tourism resources of Lantau Island as shown in Figure 4.1 was established. It is made with reference to

the relevant studies identified (Deng *et al.*, 2002; Li and Dewar, 2003) and the availability of corresponding information. Three major components were identified as resources and attractions, capital, and policies and planning to form the basis of further investigation. The components selected are considered to be important and inclusive in showing existing major tourism resources on the island. The details of each components and subdivisions have been illustrated in Chapter 3.

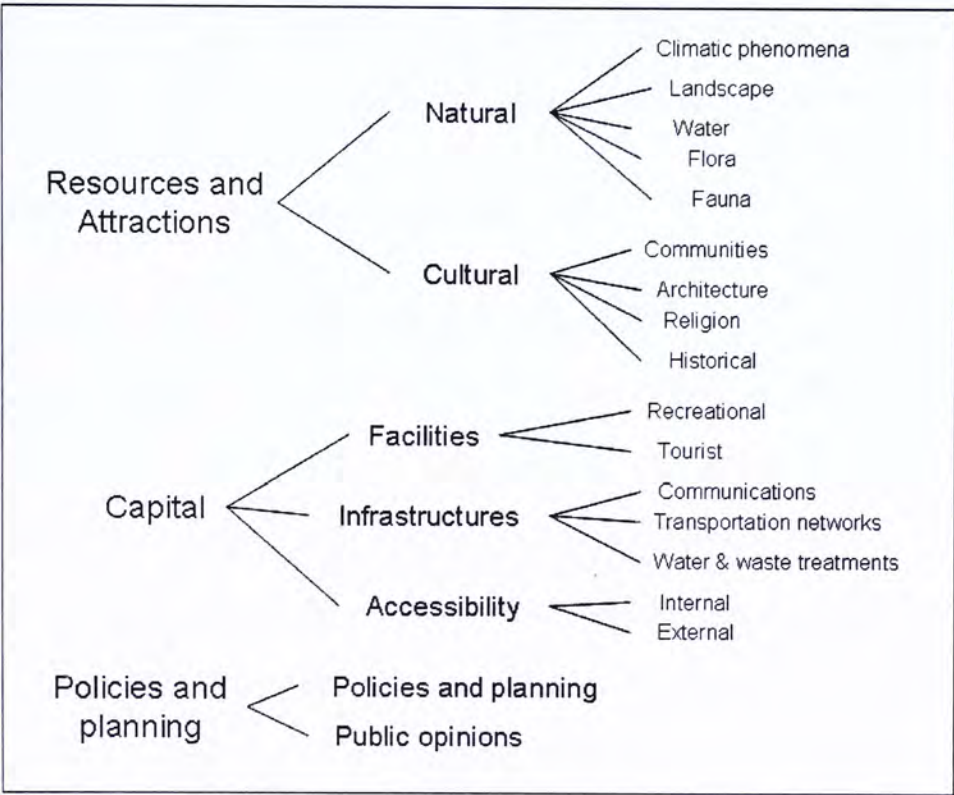


Figure 4.1 Hierarchical structure of tourism resources on Lantau Island

Most of the information of the inventory is adopted from secondary materials. Though some of the facts may not be as updated and accurate as primary investigations, the inventory is seen as supplementary background information to the research. The details of tourism resources and attractions as well as capital, are obtained from reports or studies by tourism organizations and green groups, government documents, destination marketing materials, academic research papers, maps, tour guidebooks, and World Wide Web. Also, information referring to tourism

policies and planning are mainly obtained from the government planning and development documents.

Apart from secondary materials, public opinion was also collected from semi-structured interviews. Most of the public opinion towards tourism planning and policies of Lantau Island were reviewed from the newspaper, discussion forums, government consultation reports, etc. However, as those opinions from the secondary materials may have been manipulated by reporters; interviews can assist in getting primary opinions from the stakeholders and local communities.

4.3 Interviews and questionnaire survey

To collect primary opinion from various groups of people, interviews and questionnaire surveys were conducted from February 2006 to January 2007. Targeted interviewees were divided into three groups, namely stakeholders, tourists, and local community. “Stakeholders” refer to those engaged in the decision making process of ST development in Hong Kong and Lantau Island. It included those from the tourism businesses, government departments, non-profit making organizations, etc. “Tourists” and “local community” could also be regarded as stakeholders in ST development. Yet, the data collection method and questions posed were different and thus separated from the group of “stakeholders”.

Three different sets of questionnaires (Appendices 7, 9a and 9b, 10a and 10b), one for each survey, were designed in English and translated to Chinese. The questionnaires included a few similar questions by which perceptions of different groups of respondents can be compared, as well as some questions specifically designed for each group’s respective concerns. The details of methodology for each interview and survey are described in the following sections.

4.3.1 Structured interview with stakeholders

From the resources inventory of Lantau Island, some potentials and weaknesses of Lantau for ST development were identified. With the intention of getting a more objective and convincing result, structured face-to-face interviews with stakeholders were conducted. Relevant and organized information were obtained from the interviewees who expressed their views and opinions in open-ended formats.

The structured interview of this study included a set of questionnaire (Appendix 7) with closed quantitative questions and standardized open-ended questions. The closed quantitative questions were designed in a 5-point Likert scale format. Scores of the responses were summed to give a composite measure of attitudes. On the other hand, the open-ended questions allowed in-depth exploration of every aspect of the respondents' thoughts (Tracy, 2005). From this exercise, a rich amount of information was gathered for further evaluation.

4.3.1.1 Sample selection

The interviewees were mostly stakeholders in tourism industry and belonged to the leaders of corresponding organizations. They can be classified into four groups namely (1) government officials (G), (2) academics (A), (3) businessmen (B), and (4) representatives of non-government or non-profit making organizations (NGO/ NPO) (N). Most of them were invited from the Coalition on Sustainable Tourism (CST) which was established in 2004 by enthusiasts for the sake of ST development in Hong Kong. A total of 29 stakeholders were interviewed. The interviews lasted for about 30 to 90 minutes each with the completion of the questionnaire.

4.3.1.2 Questionnaire design

The questionnaire was developed in English for the convenience of thesis writing.

Yet, for the convenience of some local interviewees to express their opinion, some interviews were conducted in Cantonese to make sure there is clear understanding of ideas. Recordings of content in interviews were then translated back to English.

The questionnaire was divided into two parts. The first part aimed at identifying the potentials and limitations of Lantau Island for ST development from the perspective of interviewees. The second part aimed at realizing the opinions of interviewees toward tourism policy and development on Lantau Island.

4.3.1.2.1 SWOT analysis

SWOT analysis is a simple tool to realize the internal (Strengths and Weaknesses) and external (Opportunities and Threats) factors so that strategies can be recommended to ensure the best alignment (Doratli *et al.*, 2004). Nevertheless, conventional SWOT analysis has often been criticized as too broad and failing to analytically determine the importance of certain factors. It is only left at the level of pinpointing or listing the factors based on incomplete qualitative examination of internal and external situations (Valentin, 2001; Kangas *et al.*, 2003; Doratli *et al.*, 2004). Hence, various stakeholders were interviewed in this research to get their opinions towards the SWOT checklist of Lantau Island for ST development, and to identify any gap in perceptions between stakeholders and the researchers. Consequently, the qualitative subjective result of SWOT analysis was turned into more objective quantitative indices for further analysis.

To this end, the first part was designed in close-quantitative-questions format. The design was based on Strengths, Weaknesses, Opportunities and Threats (SWOT) analysis with emphasis on three key variables: resources and attractions, capital, and policies and planning (Figure 4.1). Resources and attractions comprise of both natural

and cultural or human tourism resources. Capital includes infrastructures, facilities, accessibility, etc. Policies and planning belong to the government policies and planning of tourism on Lantau Island. These three variables are vital in the successful formation of tourism products and formulation of strategies for future tourism development.

A list of SWOT of Lantau Island for ST development, with a total of 44 descriptions, was listed as tables based on the tourism resource inventory of Lantau Island. The detail explanations and descriptions of SWOT are shown in Appendix 8. Interviewees were asked if they agree or not that descriptions in the checklist are the SWOT of Lantau for ST development. Responses were recorded in Likert scale from strongly disagree (1) to strongly agree (5). It aimed at finding out the potentials (from Strengths and Opportunities) and limitations (from Weaknesses and Threats) of Lantau Island for ST development. Interviewees were also invited to give other opinions on the SWOT in addition to those listed by the researchers.

4.3.1.2.2 In-depth open-ended interview

The second part of the questionnaire included a total of nine standardized open-ended questions. The questions were generally divided into two sections. A total of three questions in the first section were asked to review tourism policies and development in Hong Kong and also to find out the interviewees' general interpretation of ST. They were questions aiming at realizing the general point of views on tourism development in Hong Kong and specifically on Lantau Island.

The second section included six questions related to tourism clustering and ST practices. This part narrowed down the focus to the tourism development on Lantau Island and Ngong Ping. It attempted to look for the contributions of tourism clustering

to tourism sustainability. The perception of interviewees toward the idea of tourism clustering can also be reviewed.

The questions were asked in sequence and interviewees were able to express their opinions freely. Some additional questions might have been asked in response to the answers of some respondents.

4.3.1.3 Data analysis

In the first part of the questionnaire, the level of agreement of interviewees was reflected. Mean, median, frequency and percentage of each item were calculated by Microsoft EXCEL software. It is believed that the higher the scores of agreement for the description, the more likely to be either the S, W, O, T of Lantau Island for ST development and vice versa.

4.3.1.3.1 Informal content analysis

To analyze the data collected from in-depth interview, a simplified and modified informal content analysis was utilized. Content analysis is “*a research technique for making replicable and valid inferences based on the systematic and objective analysis of communications*” (Donohoe and Needham, 2006, p.196). It is one of the popular ways in examining data in printed form to look for similarities, differences and outstanding elements (Jordon *et al.*, 1999). Some scholars (Lemke, 1998; Li and Dewar, 2003) applied the technique in analyzing data collected from in-depth interview to compare answers from interviewees. Content of interviews were recorded in text or transcripts to scan for recurring themes and phrases. It is referred to informal content analysis, which is often used in exploratory research to determine directions for further qualitative investigation (Li and Dewar, 2003).

The analysis undertaken in this study was derived from informal content analysis

while words and phrases were extracted from detailed notes rather than verbatim transcripts. Contents were scanned for recurring major phrases in relation to the research questions. Ideas and opinions of interviewees were then summarized for further analysis and subsequent discussion.

4.3.2 Structured questionnaire survey with tourists

Structured questionnaire survey was similarly carried out to collect information from tourists visiting Ngong Ping. The purpose of conducting the survey was to investigate tourists' perception on the performance of attractions in Ngong Ping, and its contribution to tourism sustainability.

4.3.2.1 Sample selection

A total of 1,050 tourists were interviewed in Ngong Ping from April 2006 to October 2006. To realize the satisfaction level and perception on the cluster, respondents who have finished their journey in Ngong Ping and are 18-year-old or above were selected at the bus terminals near the Big Buddha and the Ngong Ping Skyrail terminal (Refer to Figure 3.6 in Chapter 3). Selected respondents included visitors both from Hong Kong and from all over the world. The interviews were conducted face-to-face asking the survey questions verbally.

A total of 700 tourists were interviewed before Cable Car's opening while only a total of 350 tourists were interviewed after the opening to warrant comparison. Data were analyzed from the total of 1,050 respondents (interviewed in the whole surveying period), while some questions were analyzed in consideration of the difference in sample size adopted.

4.3.2.2 Questionnaire design

The questionnaire (Appendices 9a and 9b) was developed in English, and

translated in Chinese (printed in both traditional and simplified versions) for the sake of a majority of Hong Kong and Mainland Chinese tourists. It was divided into three parts with a total of twenty five questions. The first part included thirteen questions and tourists were asked of their perception and satisfaction towards the visits to tourist attractions in Ngong Ping. It aimed at investigating the performance of tourist attractions in Ngong Ping, and tourists' opinion towards the clustering of attractions. Most of the questions in this part were close-ended and respondents were given a limited number of choices to choose from. They were also asked of their level of satisfaction towards the attractions in a Likert scale format.

The second part included seven questions which sought tourists' perception on the contribution of attractions to tourism sustainability. Some open-ended questions were provided to encourage wordy responses. For instance, tourists were asked to define "sustainable tourism" in an open question rather than a close question with limited number of choices to choose from. It aimed at realizing tourists' understanding and interpretation of the concept. Following from above, the questions narrowed down tourism sustainability to three major aspects: environmental, socio-cultural and economic aspects. This was considered easier for the researcher to investigate the perception on contribution of Ngong Ping cluster to tourism sustainability with special attention on the three dimensions chosen.

The third part included five questions aimed at getting general demographic information about the tourists.

4.3.2.3 Data analysis

As most of the data collected from the survey belonged to descriptive and nominal data that are discrete, they were summed to give measures of frequency and

percentage for further analysis. They were analyzed using the Statistical Package for the Social Sciences (SPSS) version 11.0. T-test and chi-square test were used to compare differences between some results before and after the opening of the Cable Car. The tests were also applied to examine the differences in results between variables like nationality, age group and education level. The level of probability for rejecting the null hypothesis was 0.05.

4.3.3 Structured interviews with local community

Perception of local community is influential in affecting tourism sustainability. As mentioned earlier, one of the fundamental elements to tourism sustainability is “positive response of residents towards tourism development” (Hinch, 1998). Therefore, interviews with local community in Ngong Ping were carried out to examine their perception on the development of tourism cluster in Ngong Ping and its contribution to tourism sustainability. It is believed that the attitudes of local residents may differ from tourists as they are mostly and directly affected by the impacts and changes of tourism cluster development. If the opinions of residents are to a certain extent positive, the tourism development could be considered as being on the path of sustainability.

4.3.3.1 Sample selection

As introduced in Chapter 3, the population size in Ngong Ping is small with about 110 residents reported in 2001 Census. Most of them are Monks and Nuns with a minority of ordinary households. Therefore, instead of quantitative survey with a large group of residents, qualitative non-scheduled in-depth interview with a limited number of residents was chosen as the methodology. During sample selection, there could be various types of residents with different opinions on tourism development and impacts (Krippendorff, 1999). It is important to interview residents from each type

of group to avoid the adoption of one-sided information. Due to the consideration of safety and accessibility to some of the village houses, interviewees could only be selected randomly by visiting local stores and knocking on the doors of village houses along the public road. A total of nine interviews were finally conducted face-to-face with residents.

4.3.3.2 Questionnaire design

The questionnaire (Appendices 10a and 10b) was developed in English, and translated in Chinese to facilitate interviewees in understanding the questions. There were a total of fourteen questions. Nine questions were asking for attitudes toward the impacts of existing development of tourism cluster in Ngong Ping. Most of the questions were open-ended. One question was further divided into small parts to seek for opinions on environmental, socio-cultural and economic aspects of the tourism development. Instead of asking the residents to define ST, they were asked to express their views in the corresponding aspects of ST (i.e. environmental, socio-cultural and economic aspects). The researcher expected that their interpretation of ST can be explored from their expressions.

Though a set of questionnaire with standardized questions were prepared, questions were asked in a guided approach format. It allowed in-depth probing while the interview was still kept within specific parameters of the study (Berry, 1999). Subsequent relevant questions that were not previously designed were also asked where relevant.

4.3.3.3 Data analysis

As the sample size for the interviews with local community was small, data collected from interviews were analyzed in qualitative method. Informal content

analysis was adopted with similar approach in analyzing data collected from interviews with stakeholders. Contents were divided into groups according to the study objectives. The recurrences of major phrases were summarized for further investigation.

4.4 Perception of stakeholders as the basis for assessment

Instead of using indicators and benchmarking, opinions of major stakeholders (e.g. tourism operators, tourists, local communities, etc.) were collected by interviews and questionnaire survey as the basis to assess the S/W/O/T of Lantau Island for ST development, as well as identifying the performance of tourism cluster in Ngong Ping in the context of ST. There are several reasons for the adoption of perception of stakeholders for assessment rather than using indicators for measurement.

First, objective and reliable indicators and benchmark for assessing SWOT of Lantau Island and the contribution of Ngong Ping cluster to tourism sustainability are lacking. It is noticed that there are various groups of ST indicators developed by international organizations like World Tourism Organization of United Nations (UNWTO) and International Institute for Sustainable Development (IISD). However, such indicators (listed in Chapter 2) were criticized as too general and imprecise (Farsari and Prastacos, 2001). There is also the problem of a lack of indices and benchmarks for assessment, which poses difficulties in monitoring whether or not the development is on the pace of SD (Moffatt, 1996).

Even though there are some precise and applicable ST indicators (Vellas, 2004), they may not be suitable for the case of Lantau Island. This is because the tourism resource, capital, policies, market, etc., of a destination vary from place to place. The diverse characteristics and situations of regions make interregional comparison and

determination of specific values by quantitative indicators impossible (Laimer and Ohlbock, 2004). Thus, a different set of indicators is required for different destination to achieve meaningful evaluation and planning. In Hong Kong, a set of indicators especially for tourism sustainability is absent.

Second, indicators and some existing general technical data maybe useful in measuring and assessing general sustainability of a region, but it may not be appropriate in examining tourism sustainability (Ko, 2005). The Hong Kong government has suggested a set of sustainability indicators in SUSDEV 21 (HKPD, 1998). The indicators may be useful in assessing the general progress of sustainable development for the community, but it is very difficult to identify the contribution of tourism activities to the general situation. For example, regardless of the level of consumption of natural resources or the level of environmental quality, it is impossible to verify the extent to which the levels are contributed by the tourism activities, but not other development activities. Therefore, these measures can only be served as additional supplementary information linking to tourism assessment.

Third, perception study has been widely adopted and employed to investigate tourism impacts (Akis *et al.*, 1996; Baysan, 2001; Williams and Lawson, 2001; Tosun, 2002; Deng *et al.*, 2003; Dyer *et al.*, 2007) and tourism sustainability in recent years (Kaae, 2001; Cottrell *et al.*, 2004; Choi and Sirakaya, 2005; McDonald, 2006). Opinions were adopted from tourists, local residents or tourism related stakeholders by interviews and questionnaire survey to realize their attitudes and for tourism planning and management. It is also considered to be one of the most appropriate and easiest ways to assemble and measure diverse opinions (Ko, 2005).

Fourth, participation of all relevant stakeholders is one of the influential

principles in achieving ST development (UNWTO, 2004). Stakeholders including tourism experts, tourism planners, tourism operators, local community, tourists, etc., are key members in articulating ST development. According to Bell and Morse (1999), “local people often have clear ideas about what is sustainable from their own perspective and in their own terms without an expert’s view”. Hence, the attitudes of local community must be realized in tourism development for the sake of tourism sustainability. On the other hand, some may argue that tourists may not be fully aware of the impacts caused by tourist activities (Cottrell *et al.*, 2004). Consequently, results do not necessarily represent the actual tourism sustainability of the destination. Yet, tourists are the customers in tourism industry. Their opinions and satisfaction level towards the destination are important for future improvement that affects long term viability of the tourism activities.

Finally, the uncertainty of sustainability is another reason for the employment of perception study (Ko, 2005). As the practice and monitoring of ST is still a controversial issue, it is suggested that the best currently known way should be used, until a perfect method is developed to cope with corresponding problems (UN, 2004).

In the following two chapters, perceptions of interviewed stakeholders including tourism operators, government officials, representatives from NPO or NGO, tourists, and local community members of Lantau Island and Ngong Ping would be presented for further investigation and discussion.

CHAPTER 5 UNDERSTANDING LANTAU ISLAND AND TOURISM CLUSTER FROM STAKEHOLDERS' PERSPECTIVE

In order to understand the opinions of stakeholders about the ST development of Lantau Island, about one hundred emails were sent and telephone calls were made to various stakeholders including tourism operators in Ngong Ping, related government officials, green groups, members of Coalition on Sustainable Tourism (CST) and some other related participants on Lantau Island and Ngong Ping tourism development. They were invited to complete a questionnaire followed by a face-to-face in-depth interview for about 30 to 90 minutes thereafter. A total of twenty nine stakeholders were successfully contacted with the completion of structured in-depth interviews from February to April 2006. Twenty seven of them were interviewed face-to-face while two were interviewed on the telephone. This chapter attempts to show the results of interviews with stakeholders.

5.1 Results of SWOT analysis from stakeholders' perspective

In order to investigate the potentials and weaknesses of Lantau Island for ST development, SWOT analysis was employed. Results of the opinions given by stakeholders on strengths, weaknesses, opportunities and threats of Lantau Island for ST development are listed in Tables 5.1a-1d. Interviewees were asked to express their level of agreement on the statements provided. Twenty four interviewees responded to this section and the results are summarized in percentages, means and median values.

Table 5.1a Strengths of Lantau Island for ST development

STRENGTHS	Strongly Disagree	Disagree	Disagree total*	Neutral	Agree	Strongly Agree	Agree total#	Mean	Median	SD
	1	2		3	4	5				
1. Resources and Attractions	%	%		%	%	%				
a) Abundant natural resources	0	0	0	0	39.1	60.9	100	4.61	5	0.449
b) Outstanding scenery with various high value natural landscapes	0	0	0	8.3	16.7	75	91.7	4.67	5	0.637
c) Variety of fauna and flora species/ biodiversity	0	0	0	8.3	37.5	54.2	91.7	4.46	5	0.658
d) Beautiful beaches and shorelines	0	4.5	4.5	8.3	45.8	41.7	87.5	4.25	4	0.794
e) Most part of the southern island remain undeveloped	0	0	0	16.7	33.3	50	83.3	4.33	4.5	0.761
f) Presence of Site of Special Scientific Interest (SSSI) (e.g. Sunset Peak, Lantau Peak, Tai Ho Stream, etc.)	0	8.3	8.3	16.7	41.7	33.3	75	4.00	4	0.933
g) Large green area provides relatively good air quality	0	4.3	4.3	26.1	34.8	34.8	69.6	4.00	4	0.905
h) With both traditional (e.g. Tai O) and modern (e.g. Tung Chung New Town) cultures of HK	0	8.7	8.7	8.7	56.5	26.1	82.6	4.00	4	0.853
i) Presence of purpose-built attractions (e.g. Theme Park)	8.3	4.2	12.5	8.3	70.8	8.3	79.1	3.67	4	1.007
Others: <u>many monasteries</u>										
2. Capital (Infrastructures, Facilities, Accessibility, etc.)										
a) Improved accessibility from urban areas to NE Lantau	0	8.7	8.7	8.7	69.6	13	82.6	3.87	4	0.757
b) The Ngong Ping 360 Project with Cable Car	0	25	25	8.3	54.2	12.5	66.7	3.54	4	1.021
Others: <u>many walking trails, distance away from the urban</u>										
3. Policies and planning										
a) Conservation and educational purposes of the natural landscape and Country Parks	0	4.3	4.3	4.3	56.5	34.8	91.3	4.22	4	0.736
b) Concentration of tourist attractions on Lantau Island	0	14.3	14.3	23.8	61.9	0	61.9	3.48	4	0.750
c) Promotions of Lantau Island in the International markets by HKTb	8.7	21.7	30.4	30.4	34.8	4.3	39.1	3.04	3	1.065
d) Consultations with the stakeholders about the development projects on Lantau Island	18.2	4.5	22.7	18.2	45.5	13.6	59.1	3.32	4	1.323
e) Individual Visit Scheme may increase tourists to Lantau Island	0	14.3	14.3	14.3	52.4	19	71.4	3.76	4	0.944

* Combined results of strongly disagree with disagree; # Combined results of strongly agree with agree

Table 5.1b Weaknesses of Lantau Island for ST development

WEAKNESSES	Strongly Disagree	Disagree	Disagree total*	Neutral	Agree	Strongly Agree	Agree total#	Mean	Median	SD
	1	2		3	4	5				
	%	%		%	%	%				
1. Resources and Attractions	0	12.5	12.5	16.7	37.5	33.3	70.8	3.92	4	1.018
a) Reclamations in Northern Lantau have disturbed the marine habitats	8.7	26.1	34.8	34.8	17.4	13	30.4	3.00	3	1.168
b) Size limitation of the HK Disneyland	4.3	26.1	30.4	30.4	34.8	4.3	39.1	3.09	3	0.996
c) Lack of special festivals on Lantau Island										
Others: <u>too many artificial attractions</u>										
2. Capital (Infrastructures, Facilities, Accessibility, etc.)										
a) Relatively far location from the urban areas/ CBD of HK	26.1	39.1	65.2	4.3	30.4	0	30.4	2.39	2	1.196
b) Relatively high transportation cost for local tourists	13	30.4	43.4	13	30.4	13	43.4	3.00	3	1.314
c) Limited kinds of transport traveling around the whole Lantau Island	21.7	21.7	43.4	4.3	43.5	8.7	52.2	2.96	4	1.397
d) Far away from the emergency services (e.g. Hospitals)	21.7	17.4	39.1	17.4	43.5	0	43.5	2.83	3	1.230
e) Insufficient mobile phone network coverage in the Country parks and Southern Lantau	18.2	13.6	31.8	31.8	22.7	13.6	36.3	3.00	3	1.309
f) Tourist services are mostly focused on some attractions only	0	21.7	21.7	4.3	56.5	17.4	73.9	3.70	4	1.020
g) Lack of information centers	0	8.7	8.7	8.7	60.9	21.7	82.6	3.96	4	0.825
Others: <u>lack of small scale ancillary facilities, FandB/ restaurants</u>										
3. Policies and planning										
a) Lack of comprehensive framework and principles for ST development on Lantau Island	8.7	8.7	17.4	4.3	34.8	43.5	78.3	3.96	4	1.296
b) Lack of ST guidelines, indicators and policies to help the industry	9.1	9.1	18.2	9.1	27.3	45.5	72.8	3.91	4	1.342
Others: <u>lack of eco-tour guides training</u>										

* Combined results of strongly disagree with disagree; # Combined results of strongly agree with agree

Table 5.1c Opportunities of Lantau Island for ST development

OPPORTUNITIES	Strongly Disagree	Disagree	Disagree total*	Neutral	Agree	Strongly Agree	Agree total#	Mean	Median	SD
	1	2		3	4	5				
1. Resources and Attractions										
a) Excellent possibilities for ecotourism in Southern Lantau	0	8.3	8.3	4.2	50	37.5	87.5	4.17	4	0.868
b) Nature trails, long distance hiking trails and country trails for ecotourism	0	0	0	0	45.8	54.2	100	4.54	5	0.509
c) Potential areas for the extension of Country Park	0	8.3	8.3	4.2	45.8	41.7	87.5	4.21	4	0.884
d) Religious buildings and historical monuments provide more cultural attractions	0	8.3	8.3	8.3	54.2	29.2	83.4	4.04	4	0.859
e) Diversity of attractions on Lantau Island for various kinds of visitors	4.5	9.1	13.6	9.1	59.1	18.2	77.3	3.77	4	1.020
Others: <u>Development of spiritual and cultural tourism</u>										
2. Capital (Infrastructure, Facilities, Accessibility, etc.)										
a) Construction of visitor centers can provide more visitor information and orientation	0	13	13	4.3	65.2	17.4	82.6	3.87	4	0.869
b) Presence of AsiaWorld-Expo and Sky City	8.7	26.1	34.8	30.4	21.7	13	34.7	3.04	3	1.186
3. Policies and planning										
a) Increasing investments on Lantau Island for tourism developments	13	8.7	21.7	26.1	30.4	21.7	52.1	3.39	4	1.305
b) Development of Sunny Bay as a tourism node	13.6	31.8	45.4	22.7	27.3	4.5	31.8	2.77	3	1.152
c) Preservation of Tai O culture	0	0	0	4.3	47.8	47.8	95.6	4.43	4	0.590
d) A Vision for the Silvermine Bay Waterfront suggested by the local community on Lantau Island	0	8.3	8.3	8.3	54.2	29.2	83.4	4.04	4	0.859
e) New Nature Conservation Policy for Hong Kong (e.g. Tai Ho)	0	8.7	8.7	13	52.2	26.1	78.3	3.96	4	0.878

* Combined results of strongly disagree with disagree; # Combined results of strongly agree with agree

Table 5.1d Threats of Lantau Island for ST development

THREATS	Strongly Disagree	Disagree	Disagree total*	Neutral	Agree	Strongly Agree	Agree total#	Mean	Median	SD
	1	2		3	4	5				
	%	%		%	%	%				
1. Resources and Attractions	0	25	25	8.3	29.2	37.5	66.7	3.79	4	1.215
a) Further development on Lantau will cause strain on ecosystem										
Others: <u>Competitions from NENT and SENT</u>										
2. Capital (Infrastructures, Facilities, Accessibility, etc.)	4.5	9.1	13.6	22.7	50	13.6	63.6	3.59	4	1.008
a) Insufficient waste treatment and recycling facilities on Lantau Island										
3. Policies and planning	4.3	4.3	8.6	4.3	39.1	47.8	86.9	4.22	4	1.043
a) Lack of realistic and long-term ST development planning for Lantau Island										
b) Lack of regulations for the implementation of ST practices on Lantau Island	0	8.7	8.7	8.7	39.1	43.5	82.6	4.17	4	0.937
Others: <u>lack of villagers participation and collaboration</u>										

* Combined results of strongly disagree with disagree; # Combined results of strongly agree with agree

5.1.1 *Strengths*

As shown in Table 5.1a, more than 65% of stakeholders agree or strongly agree with most of the statements listed as the strengths of Lantau for ST development except on three items (i.e. concentration of tourist attractions on Lantau Island [61.9%], promotion of Lantau Island in the international markets by the HKTB [39.1%], consultations with the stakeholders about the development projects on Lantau Island [59.1%]). Statements like “Abundant natural resource” (100%), “Outstanding scenery with various high value natural landscapes” (91.7%), “Variety of fauna and flora species/ biodiversity” (91.7%), and “Conservation and educational purposes of the natural landscape and Country Parks” (91.3%) showed high level of agreement with high mean values of 4 or above. In addition to the listed items, some stakeholders mentioned that the presence of many monasteries and walking trails on Lantau Island also represents its strength for ST development.

The availability of sufficient capital and suitable policies are also influential for sustainable development of the tourism industry. In this study, 82.6% and 91.3% of interviewees regarded the improved accessibility from urban areas to Lantau Island and the presence of country parks as strengths of Lantau Island for ST development. Improvement in transport networks favor visitors’ traveling between destinations and places of accommodation. Destinations with high accessibility can thus facilitate and attract frequent visits.

On the other hand, a relatively smaller percentage of respondents (34.8%) with a mean value of 3.04 agreed with the statement on promotion of Lantau Island in the international markets by the HKTB as strength of Lantau Island for ST development. Some stakeholders thought that the promotion of Lantau Island carried out by HKTB in the international markets is not comprehensive. One of the respondents gave the

following comment, *“I think they’ve done a good job for some of the promotion of attractions like Disneyland. I don’t think they are particularly promoting Lantau, or promoting the more diverse attractions of Lantau. I think they tend to stick to the major products. They don’t promote the holistic destination”* (Author’s interview, B06, 09 March 2006). Another interviewee complained, *“On the government side what is seen as an attraction is something that has to be built. HKTB promotes those built attractions like Disney, Wetland Park, etc. only”* (Author’s interview, N03, 11 March 2006). It seems that only one or two famous tourist spots on the island were selected and highly promoted.

Besides, “concentration of tourist attractions on Lantau Island” implying the formation of tourism cluster was classified by the researcher as the strength of Lantau Island for ST development. 61.9% of interviewees with mean score value of 3.48 agreed with the statement. Some interviewees expressed both pros and cons of tourism cluster in ST development which will be further discussed in Section 5.2.3.

5.1.2 Weaknesses

In assessing the weaknesses of Lantau Island for ST development, the responses to the level of agreements for the statements were quite diverse. Majority of interviewees agreed or strongly agreed with statements like “Reclamations in Northern Lantau have disturbed the marine habitats” (70.8%), “Lack of information centers” (82.6%), and “Lack of comprehensive framework and principles for ST development on Lantau Island” (78.3%), etc. Conversely, many interviewees (65%) disagreed or strongly disagreed that distance away from the urban area is a weakness for ST development on Lantau Island.

Given that a holistic framework and principles for ST development is a

prerequisite for successful ST development, many interviewees (78.3%) were disappointed about the current situation in Hong Kong and Lantau Island for ST development. Some interviewees thought that the government does not have a holistic approach in tourism planning and development, which lead to the problem of curing the symptoms only, but not the disease (Author's interviews, B04, 02 March 2006; B05, 14 March 2006). Though the government proposed Lantau Concept Plan as a long term and overall planning for Lantau development, an interviewee thought that *"the establishment of the Lantau Concept Plan is totally disconnected with the previous planning"* (Author's interview, B05, 14 March 2006). The lack of holistic ST framework and principles is also voiced by another interviewee, *"The absence of principles will only lead to inconsistent planning and policies"* (Author's interview, A02, 06 March 2006). 72.8% of interviewees agreed or strongly agreed that "lack of ST guidelines, indicators and policies to help the industry" in practicing ST is another weakness facing ST development on Lantau Island.

On the other hand, more than 65% of stakeholders with mean value of 2.39 disagreed or strongly disagreed that "relatively far location of Lantau Island from the urban areas" is a weakness for ST development. Instead, some regarded that as strength to experience tourism away from the busy urban areas. An interviewee replied, *"Relatively far away from the urban areas is rather a strength. You have to go to distant places so that you can find a piece of natural forest"* (Author's interview, G05, 03 March 2006).

One of the weaknesses as indicated is "relatively high transportation cost for local tourists" when comparing with attractions near urban area. It was considered that the intention of frequent visit to Lantau Island by local tourists would be lowered. The percentage of interviewees agreed and disagreed with the statement were similar

(43.4%) with mean value of 3.00.

Moreover, “excessive artificial attractions”, “lack of small scale ancillary facilities” and “lack of eco-tour guides training” were mentioned as other weaknesses of Lantau Island for ST development. Some interviewees regarded that it was meaningless to create artificial attractions to attract tourists (Author’s interviews, B06, 09 March 2006; N03, 11 March 2006; G02, 17 March 2006). Artificial attractions like Wisdom Path in Ngong Ping and Disneyland were seen as mismatch with the environment and culture of the area. Also, one interviewee commented that some nature or eco-tour guides were not trained with enough knowledge about nature (Author’s interview, N02, 08 March 2006). This may hinder the development of ecotourism which is a kind of ST practices.

5.1.3 Opportunities

Many stakeholders agreed or strongly agreed with most of the statements about opportunities of Lantau Island for ST development. All stakeholders (100%) agreed that nature trails, long distance hiking trails and country trails on Lantau Island provided opportunities to practice ecotourism. Many trails on the island were provided not only for hiking purposes, but also provided educational opportunities for the public to learn to conserve and know more about nature. Yet, more promotion and supplementary policies and facilities may be required to organize and raise public awareness and interest in joining eco-tours on the island. 87.5% of stakeholders agreed or strongly agreed that there are “excellent possibilities for eco-tourism in Southern Lantau”. It is expected that the undeveloped attractive coastal view with various natural habitats in Southern Lantau has great potential to sustain tourism activities. In addition, the proposed extension of Country Park on the island was also agreed (87.5%) as an opportunity. It implies that more and more natural areas would

be conserved for the sake of preserving natural biodiversity, as well as providing opportunity for development of nature-based tourism.

One of the government's policies is the "preservation of Tai O culture", which also received high percentage of agreement (95.6%) implying that as an opportunity for ST development on Lantau. Majority of the stakeholders agreed that Tai O is a valuable place providing a different kind of unique culture. Alternatively, 45.4% of interviewees disagreed or strongly disagreed that "Development of Sunny Bay as a tourism node" was an opportunity of Lantau Island for ST development.

With the presence of various religious and cultural buildings, an interviewee believed that there is the potential of developing spiritual and cultural tourism on Lantau Island (Author's interview, N02, 08 March 2006). The respondent believed that the peaceful and unique spiritual atmosphere made up by the Big Buddha and surrounding monasteries can provide opportunity for another kind of tourism development with sustainable practices.

5.1.4 *Threats*

Most of the interviewees agreed or strongly agreed with all of the statements describing the threats of Lantau for ST development. 66.7% and 63.6% of interviewees agreed that "further development on Lantau will cause strain on ecosystem", and "insufficient waste treatment and recycling facilities on Lantau Island" were threats to ST development respectively. A majority of interviewees agreed that "lack of realistic and long-term ST development planning for Lantau Island" (86.9%) and "lack of regulations for the implementation of ST practices on Lantau Island" (82.6%) may threaten the successful practice of ST.

As ST development concerns satisfying the needs of present tourists and

enhancing opportunities for future generations, realistic and long term planning is the key to success. However, many interviewees mentioned that the government does not have clear vision and realistic ideas for ST development. An interviewee replied that *“There is no clear direction ... no clear rule and no leadership on how Lantau should be taken forward. There is no clear vision and the vision is not chaired”* (Author’s interview, B01, 01 March 2006). The absence of clear direction of tourism development on Lantau Island led to the failure in designing long term ST development plan.

Regulations are fundamental for operators in implementing and monitoring ST practices. 82.6% of interviewees agreed or strongly agreed that lack of ST regulations would pose a threat for successful ST development on Lantau Island. One interviewee mentioned that suitable regulations may assist tourism operators in implementing ST practices. For instance, renewable resource must be used in tourism development for the sake of environmental protection (Author’s interview, N07, 04 March 2006). However, the absence of regulations may cause difficulties in monitoring progress in ST development.

Some interviewees observed that lack of local communities’ participation and collaboration would also be a threat for ST development on Lantau Island (Author’s interviews, B07, 01 March 2006; N07, 04 March 2006; N03, 11 March 2006; N11, 11 March 2006; B05, 14 March 2006).

5.2 Understanding Sustainable Tourism and tourism cluster by stakeholders

In order to have more in-depth and detail information for further analysis, stakeholders were asked to express their opinions in open-ended answers. The data were analyzed using informal content analysis.

5.2.1 *General attitudes about “Sustainable Tourism”*

Initially, stakeholders were asked of their understanding of ST and the result is summarized in Table 5.2. The researcher believed that interviewees’ interpretation of ST would have an influence on their points of view in giving opinions for corresponding issues.

Table 5.2 Interviewees' understanding of ST

Summary of interviewees' understanding of ST	%	Rank
environmental and ecological conservation	95.83	1
socio-cultural conservation	79.17	2
enhancing economic growth	70.83	3
participation of all stakeholders	33.33	4
a balance between various aspects	16.67	5
sustain for generations	12.50	6
keep visitors coming	12.50	6
should be in small scale	12.50	6

* Total of percentages is not equal to 100% due to multiple answers

As shown in Table 5.2, almost all (95.83%) of the interviewees considered “environmental and ecological conservation” as one of the major concerns in tourism sustainability. “Socio-cultural conservation” (79.17%) and “enhancing economic growth” (70.83%) were believed to be two important pillars of ST. One-third (33.33%) of interviewees mentioned the importance of “participation of all stakeholders”, and that balance should be obtained between various aspects (16.67%) in ST development. Most of the key components and interpretation of ST suggested by interviewees were tallied with the general concept and principles of ST as suggested by UNWTO.

Nevertheless, it was inevitable that some interviewees had their beliefs on certain specific aspects in ST development. For instance, interviewees from the green groups emphasized ecological and environmental conservation as much more important than

economic growth (Author's interviews, N08, 17 February 2006; N04, 24 February 2006; N05, 24 February 2006; N09, 31 March 2006). They considered nature conservation as the primary concern so that tourism activities could be sustained. In contrast, some interviewees highlighted the importance of enhancing economic growth in ST development from the business perspectives (Author's interviews, B01, 01 March 2006; B02, 04 March 2006). It was mentioned by an interviewee that "*The main theme for us is that this is to survive the business*" (Author's interview, B01, 01 March 2006). Though different interviewees may have different views, all of them realized that ST involved numerous aspects instead of one specific aspect.

5.2.2 Tourism policies and development of Hong Kong and Lantau Island

Stakeholders were asked to express their general opinions on the existing tourism policies, planning and development of Hong Kong and Lantau Island. Differences in opinions were noticeable among stakeholders from various backgrounds. Stakeholders from the government departments expressed confidence and satisfaction with the existing tourism policies and prospects for future development. On the contrary, stakeholders from NGO/NPO or businesses were pessimistic toward existing tourism policies and planning.

Some stakeholders commented that the government does not have clear vision and direction for long term tourism development in Hong Kong, leading to piecemeal and reactive planning. This indeed leads to inconsistency with the ST principles. Some comments were extracted as follows:

"I think Hong Kong tourism policy is confused and it has no clear direction. It has no clear mission and statement for Lantau." (Author's interview, B09, 03 March 2006)

"The government has no vision. It has a tourism strategy group while the group is not discussing strategy, but projects. It discusses and considers case by case rather than the whole picture and direction. Therefore, there is no direction for tourism development in Hong Kong." (Author's interview, B05, 14 March 2006)

"The government seems to write beautiful texts but they do things that do not match with the concept. They just put things here and there." (Author's interview, N03, 11 March 2006)

"The tourism development for Lantau is piecemeal and incremental. It is based on the existing to build some more new things. It is not a holistic policy." (Author's interview, N11, 11 April 2006)

"The existing tourism policy of Hong Kong is top-down. It is not made in accordance with the principles of ST or sustainable development, which has to engage all stakeholders for the whole process but not one stage only." (Author's interview, B07, 01 March 2006)

"Government has the wills to implement ST, while the policy makers do not realize what they are looking for. And, they do not know what Hong Kong needs. They do not know where to start, and they do not know which one is the theme." (Author's interview, N01, 15 March 2006)

It seemed that most of the opinions were lamenting on the tourism policy and planning of the government. Yet, some others have provided deferring ideas:

"Hong Kong Government is still exploring the best way forward." (Author's interview, A03, 24 February 2006)

"In 1997, there was a seminar about ST in Hong Kong. And, there is tourism policy while ST policy is still in a formation stage. Thus, it is not easy to recognize whether the current policies are sustainable or not." (Author's interview, G02, 17 March 2006)

"The government may not have 'black and white' wordings stating the long-term planning for ST development in Hong Kong or Lantau Island. In practice, there are some other initiatives." (Author's interview, G01, 28 February 2006)

Doubtlessly, the concept of ST for Hong Kong is still in an infant stage. More time and discussions are required for further improvement.

Meanwhile, the government tries to introduce and promote new attractions to attract tourists and boost the economy. This was considered inappropriate by the stakeholders for the long term tourism development in Hong Kong and Lantau Island.

“The government may only have increased investments on building new things for tourism. ... For ST, you are talking about some culture attractions. But the government can only build new things. ... In the government side, what is seen as an attraction is something that has to be built.” (Author’s interview, N03, 11 March 2006)

“It is meaningless to create something to attract tourists as tourists are attracted to those attractions with historical background, like the Great Wall in China. ... Attraction should not be artificially created.” (Author’s interview, G02, 17 March 2006)

“Lantau should not be developed artificially. The natural beauty should be promoted, but not the artificial buildings, on Lantau.” (Author’s interview, N11, 11 April 2006)

5.2.3 Tourism cluster on Lantau Island

Other than general views on existing tourism policies and development in Hong Kong, interviewees were asked of their perception on clustering of tourism activities on Lantau Island. A limited number of interviewees have clearly stated their opinion on whether or not they support the clustering of tourism activities. Some respondents identified the benefits and limitations for tourism clustering, which are summarized in Table 5.3.

Table 5.3 Benefits and limitations of tourism clustering

Benefits	Limitations
Easy for management	Putting too much pressure in one area
Provide guidance for tourists to visit so that impacts could be concentrated in certain area while the rest remain unchanged	More major environmental impact would be caused
Beneficial for local community, by providing more social services, employment and opportunities for the region	Other rural areas would be neglected, in terms of economic development, transport services and visitor number
Can attract various operators to start tourism business in the region	If it cannot be well-managed, it will be a mess for the whole cluster
Good for convenience	
Enable tourists to differentiate among cluster, pick and choose cluster according to the purpose and constraints of visits	
Encourage repeat visits	
Enhance economic efficiency and benefits	
Provide target areas for tourists to visit	
Concentrate impacts and experiences in an area to cater for the greatest needs of the majority	
Economies of scale	
Provide various experiences for tourists	

Interviewees have also emphasized numerous considerations in tourism cluster development on Lantau Island. One of the biggest concerns is the issue of carrying capacity (CC). Some interviewees were worried that the CC of natural environment and impacts to local communities on Lantau Island are already limited for further development. An interviewee (Author’s interview, N08, 17 February 2006) mentioned that the destruction of environment for development may only provide short term instead of long term benefits.

Moreover, sufficient supporting facilities and services are necessary for tourism cluster development. Accessible road networks are indispensable to connect components in the cluster. Others like telecommunication networks, sewerage systems, hotels, transport services, restaurants, information centers, etc., are also required. Yet, some interviewees queried if the present tourism cluster on Lantau Island has

provided all those facilities and services adequately. The capability of the region to accommodate additional facilities was also questioned.

To be sustainable, an interviewee (Author's interview, B05, 14 March 2006) suggested that Lantau Island should be promoted as one whole tourism cluster rather than one or two spots only. The whole island was seen as a big attraction with diversified activities. ST should be practiced to preserve and enhance the tourism cluster development on the island. One of the important issues is to enhance the sense of belonging of local communities. Once the locals are proud of their communities, they would be willing to protect and preserve their culture and environment for the sake of economic benefits derived from tourism activities. Therefore, developing the sense of belonging and preservation of the environment, instead of constructing additional artificial attractions, may be a way to sustain the tourism cluster.

5.2.4 Performance of Ngong Ping tourism cluster in the context of Sustainable Tourism

Interviewees were asked to comment on the performance and contribution of tourism cluster in Ngong Ping to tourism sustainability, in the aspects of environmental and ecological protection, cultural conservation and economic enhancement.

The Cable Car of the Ngong Ping 360 project received relatively more positive comments comparing with other attractions in the cluster. MTRC (which developed and financed Ngong Ping 360) was praised as having put many commitments and investments on balancing the environmental sustainability, tourism development and building facilities (Author's interview, B04, 02 March 2006). It provided the lead to conduct environmental and ecological assessment, and set up the Sustainability

Advisory Board (SAB) prior to the construction and operation of the project. The Cable Car was regarded as one of the environmentally friendly transport systems that may not result in pollution. Consequently, there was no significant damage to the environment during the construction and operational phases (Author's interviews, B01, 01 March 2006; B09, 03 March 2006; G03, 14 March 2006; N01, 15 March 2006; N09, 31 March 2006; N11, 11 April 2006).

On the other hand, an interviewee (Author's interview, N09, 31 March 2006) stated that most of the area surrounding Po Lin Monastery has been polluted. It was mainly caused by the large amount of oil, produced from culinary activities and discharged to the river (Figure 5.1). It was also noticed by Ng (2004) that the stream was transformed into 'a flood of creamed coffee' and filled with muddy and foaming water (Figure 5.2) by the construction of Ngong Ping 360. In addition, the extension of roads and other construction works for tourism development were destructive to the natural environment of Ngong Ping.



Figure 5.1 Ngong Ping Stream with stagnant pool
Source: Mott Connell Ltd, 2005



Figure 5.2 Ngong Ping Stream polluted by the construction of Ngong Ping 360 Project
Source: Ng, 2004

With regard to the conservation of cultural heritage and traditional values, most of the interviewees did not comment whether the cluster development in Ngong Ping has made significant contribution or not. One of the most obvious conservation of cultural heritage is the Po Lin Monastery with history of over one century. With the Big Buddha and further extension in the following years, Ngong Ping has been made a destination to experience Buddhist culture (Hui, 2003).

Other than the Po Lin Monastery and local stores, most of the attractions in the cluster were not run by the locals of Ngong Ping. Some interviewees highlighted the importance of participation and satisfaction of local communities in ST development. An interviewee stated that: *“If you want to develop the region, you are not developing for the tourists; you are developing it for the local. ... Make it good for the locals, and then tourists will come”* (Author’s interview, B03, 03 March 2006). Another interviewee agreed, *“Sustainable, I think should start from the local community. ... The key thing for ST is community involvement”* (Author’s interview, N03, 11 March 2006). From the responses, it was believed that satisfying and involving the locals

would be predominant to the success of ST development. This will be analyzed in detail subsequently.

As regards the economic contribution of Ngong Ping cluster, interviewees held conservative ideas on the issue. Some of the interviewees were confident that with new attractions in Ngong Ping, it may provide long term economic benefits to Hong Kong. *“When the development is aligned with long term economic benefits for Hong Kong, the built in incentives will motivate the public and also the private sector to do a proper job”* (Author’s interview, A03, 24 February 2006). Whether the current development is aligned with sustainable economic benefits for Hong Kong is still questionable.

As attractions like Ngong Ping 360 and Wisdom Path were opened in September 2006 and May 2005 respectively, it could not be easily judged if it will be able to sustain economically (Author’s interview, G02, 17 March 2006). It depended on whether it can maintain its attractiveness and provide unique experiences for tourists. However, it could be estimated that the clustering of tourism activities in Ngong Ping, may adversely affect the economy of other parts of Lantau Island, like Mui Wo (Author’s interview, B02, 04 March 2006). Mui Wo was once an important site for transport transition and destination for tourism activities. It seems to be much less important as most of the major transport transitions are made in Tung Chung, and tourism activities in Ngong Ping and other parts of Lantau.

In addition to the opinions of stakeholders, perception of tourists and local community members or residents in Ngong Ping can also reflect the progress of ST development of the tourism cluster. Results of survey with tourists and residents would be illustrated in the following Chapter 6.

CHAPTER 6 ATTRACTIONS AND PERCEPTION OF NGONG PING TOURISM CLUSTER

Following from the foregoing, investigation has been further narrowed down to the tourism cluster in Ngong Ping. To have better understanding on the progress of ST and the perception of tourists and local residents, questionnaire survey was undertaken with tourists in Ngong Ping for ten days, with both weekdays and weekends to adopt various opinions. Interviews were also conducted with the local community members. This chapter aims at presenting the results of the survey and interviews.

6.1 Results of questionnaire survey with tourists

A total of 1,050 tourists aged 18-years or above were interviewed from June to October 2006. Table 6.1 shows the demographic profile of respondents. The proportion of male and female are about 55% and 45% respectively. About 43.5% of respondents are Hong Kong citizens, 18% were mainland Chinese and 38.5% were those from other countries. Most of them are young or middle-aged people in the age groups between 26-35 (29.9%) and 36-45 (25.3%). More than half (53.4%) of the respondents are highly educated with education level of college degree or above.

Most of the respondents visited Ngong Ping individually (92.9%) rather than visited via travel agents (5.6%) or NGOs (1.4%). A high proportion of respondents (75.2%) thought that the destination was easily accessible. Moreover, the beautiful scenery of Ngong Ping attracted a majority of visitors' (90.8%) for sightseeing, with most of them staying in Ngong Ping for about 1-2 hours (48.2%) or 3-4 hours (42.6%) only. And, only a small number came for religious (4.3%) or hiking (2.8%) purposes.

Table 6.1 Demographic profile of tourists interviewed in Ngong Ping

Demographic Information		Total (N=1050)	
		Frequency	%
Gender	Male	577	55.20
	Female	468	44.80
Nationality	HK	452	43.50
	Chinese	187	18.00
	Foreigners	401	38.50
Age Group	18-25	150	14.60
	26-35	306	29.90
	36-45	259	25.30
	46-55	179	17.50
	56-65	82	8.00
	66 or above	49	4.80
Education level	Below High School	47	4.70
	High School	166	16.50
	Some college	257	25.50
	College degree or above	538	53.40
Purpose of visit	Sightseeing	928	90.80
	Religious purposes	44	4.30
	Hiking	29	2.80
	Others	21	2.10
Duration	1-2 hours	504	48.20
	3-4 hours	466	42.60
	5-6 hours	56	5.40
	More than 6 hours	40	3.80
Modes of visit	Individual visit	975	92.90
	Travel agents	59	5.60
	NGOs	15	1.40
Accessibility	Accessible	789	75.20
	Average	156	14.90
	Not accessible	104	9.90

In addition, tourists were asked of the factors attracting them to visit Ngong Ping. Instead of the whole tourism cluster, most of the respondents were attracted by individual attractions. As shown in Table 6.2, majority of tourists (60.82%) were attracted by the Big Buddha. The beautiful and outstanding scenery of Ngong Ping (35.84%) was also one of the key factors attracting visitors. The newly opened attraction, Ngong Ping 360 (25.83%) was another popular factor attracting visitors. However, only a limited number of respondents (9.06%) were attracted to Ngong Ping due to the concentration of attractions. Other factors (6.01%) including the Po Lin Monastery and fresh air also attracted visitors to Ngong Ping.

Table 6.2 Attractiveness of Ngong Ping

Factors	Total		
	Frequency	%	Ranking
Beautiful and outstanding scenery	376	35.84	2
The spiritual atmosphere	190	18.11	4
Concentration of tourist attractions	95	9.06	5
The Big Buddha	638	60.82	1
Ngong Ping 360	271	25.83	3
Presence of hiking trails	45	4.29	7
Others	63	6.01	6

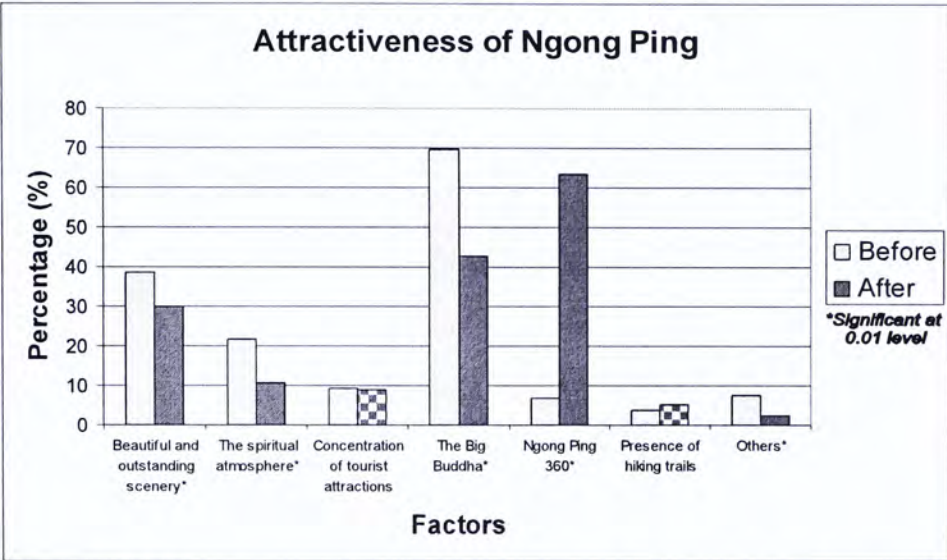


Figure 6.1 Attractiveness of Ngong Ping before and after opening of Cable Car

Table 6.3 Attractiveness of Ngong Ping before and after opening of Cable Car

Factors	Before			After			Total			Chi-square	
	Freq	%	Rank	Freq	%	Rank	Freq	%	Rank	Value	Sig
Beautiful and outstanding scenery*	271	38.77	2	105	30.00	3	376	35.84	2	7.80	0.01
The spiritual atmosphere*	152	21.75	3	38	10.86	4	190	18.11	4	18.64	0.00
Concentration of tourist attractions	64	9.16	4	31	8.86	5	95	9.06	5	0.03	0.87
The Big Buddha*	488	69.81	1	150	42.86	2	638	60.82	1	71.12	0.00
Ngong Ping 360*	49	7.01	6	222	63.43	1	271	25.83	3	387.45	0.00
Presence of hiking trails	27	3.86	7	18	5.14	6	45	4.29	7	0.93	0.34
Others*	54	7.73	5	9	2.57	7	63	6.01	6	10.97	0.00

* Significant at 0.01 level

As the researcher assumed that the opening of Ngong Ping Cable Car might result in increasing number of visitors to Ngong Ping, comparison was made on the factors attracting visits to Ngong Ping before and after the opening of the Cable Car. Chi-square test was used to evaluate the differences between the responses with regard to the attractiveness of Ngong Ping before and after opening of the Cable Car. The results shown in Figure 6.1 and Table 6.3, with the exception of two factors, (i.e. “concentration of tourist attractions” and “presence of hiking trails”) are statistically significant at 0.01 levels. Most of the respondents were attracted to Ngong Ping mainly by The Big Buddha (69.81%) and the beautiful and outstanding scenery (38.77%) before the opening of the Cable Car. Yet, after the opening of the Cable Car, Ngong Ping 360 (63.43 %) became the dominant factor attracting visitors. Though the proportion of visitors attracted by The Big Buddha (42.86%) decreased, it was still one of the major attractive factors.

6.2 Perception and satisfaction of tourists in Ngong Ping tourism cluster

Understanding the perception of tourists on destinations to maintain quality experience of tourists is fundamental for successful ST development. Hence, tourists were asked of their perception and satisfaction with the visit to Ngong Ping tourism cluster. The cluster consists of four major attractions: The Big Buddha, Po Lin Monastery, Ngong Ping 360 and Wisdom Path. Figure 6.2 shows the level of satisfaction as indicated by the respondents. Table 6.4 shows the results of mean values of respondents’ level of satisfaction to the tourism cluster before and after the opening of Ngong Ping Cable Car.

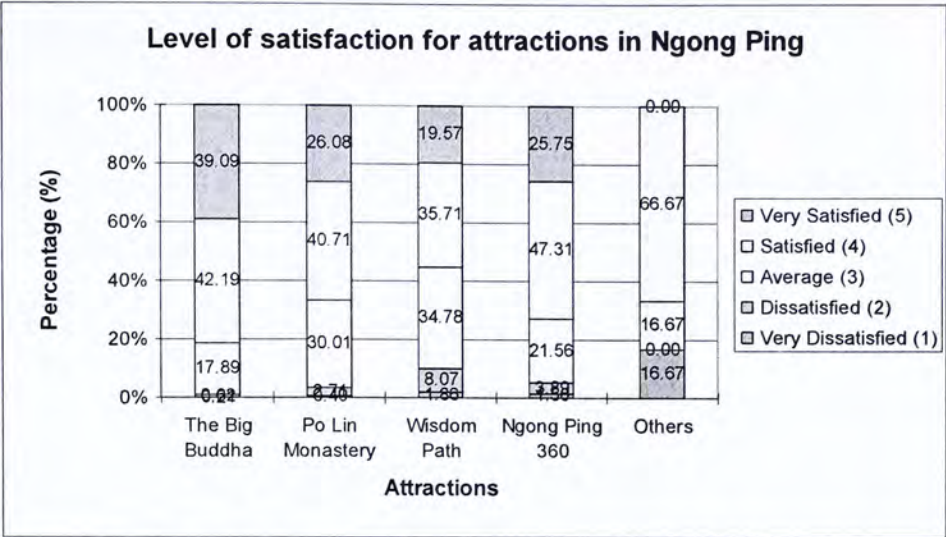


Figure 6.2 Visitors' level of satisfaction for attractions in Ngong Ping

As shown in Figure 6.2, majority of respondents were satisfied or strongly satisfied with the attractions in the tourism cluster. Specifically, about 81% and 73% of respondents were satisfied or very satisfied with their visit to The Big Buddha and Ngong Ping 360 respectively. In contrast, about 10% of respondents were dissatisfied or very dissatisfied with their visit to Wisdom Path. This was also reflected in the results of mean values of satisfaction levels (Table 6.4); as for the satisfaction level, The Big Buddha scored a high mean value of 4.19 and Ngong Ping 360 scored 3.92. The satisfaction levels for Po Lin Monastery (3.89) and Wisdom Path (3.63) were comparatively lower.

Table 6.4 Mean values of visitors' level of satisfactions before and after the opening of Ngong Ping Cable Car

Attractions	Before		After		Independent sample t-test	
	Mean	Ranking	Mean	Ranking	Value	Sig.
The Big Buddha*	4.28	1	4.01	1	5.170	0.000
The Po Lin Monastery*	3.96	2	3.74	3	3.432	0.001
Wisdom Path**	3.72	3	3.45	4	2.402	0.017
Ngong Ping 360*	3.59	4	4.01	1	-3.333	0.001
Others	3.33	5	---	---	---	---

* Significant at the 0.01 level, ** Significant at the 0.05 level

Independent sample t-test was employed to compare mean scores of attractions before and after opening of the Cable Car. The results shown in Table 6.4 are mostly statistically significant at 0.01 or 0.05 levels. Before the opening of Ngong Ping Cable Car, The Big Buddha scored the highest value of 4.28, while Ngong Ping 360 (3.59) was ranked the forth. After the opening of Cable Car, both The Big Buddha and Ngong Ping 360 scored the highest mean values of 4.01 in level of satisfaction. This showed the importance of Ngong Ping Cable Car in satisfying tourists' visit in the whole Ngong Ping 360 project.

Specifically, respondents were asked of their most favorite attraction of the cluster. Table 6.5 summarizes the results of responses. Chi-square test was used to compare differences of proportions between the responses before and after the opening of Cable Car. All results were statistically significant at 0.01 levels. Adhering to the results of level of satisfaction for each attraction shown in Table 6.4, The Big Buddha received the highest ranking followed by Ngong Ping 360. 68.4% and 16.9% of respondents in total favored The Big Buddha and Ngong Ping 360 respectively.

Table 6.5 Attractions that tourists like most

Attractions	Before		After		Total	
	%	Ranking	%	Ranking	%	Ranking
The Big Buddha	80.24	1	45.40	1	68.40	1
The Po Lin Monastery	8.85	2	5.10	3	7.60	3
Wisdom Path	4.72	3	4.60	4	4.70	4
Ngong Ping 360	3.54	4	42.90	2	16.90	2
Others	2.65	5	2.00	5	2.40	5

On the other hand, tourists were asked of their perception on the attractions. Figures 6.3 and 6.4 show the factors of satisfaction and dissatisfaction of respondents toward attractions in the cluster. With regard to the factors of satisfaction with attractions, approximately 50% of respondents considered the outstanding scenery of Ngong Ping and Lantau Island as the factor they appreciated the most. Many

respondents (31.18%) liked the restful and relaxing environment provided by the attractions. The uniqueness of attractions (26.93%) and reflection of local culture conservation (21.24%) were also factors that respondents liked most. Some other factors like magnificent, new, special architectural design, etc., were also mentioned by respondents (15.64%).

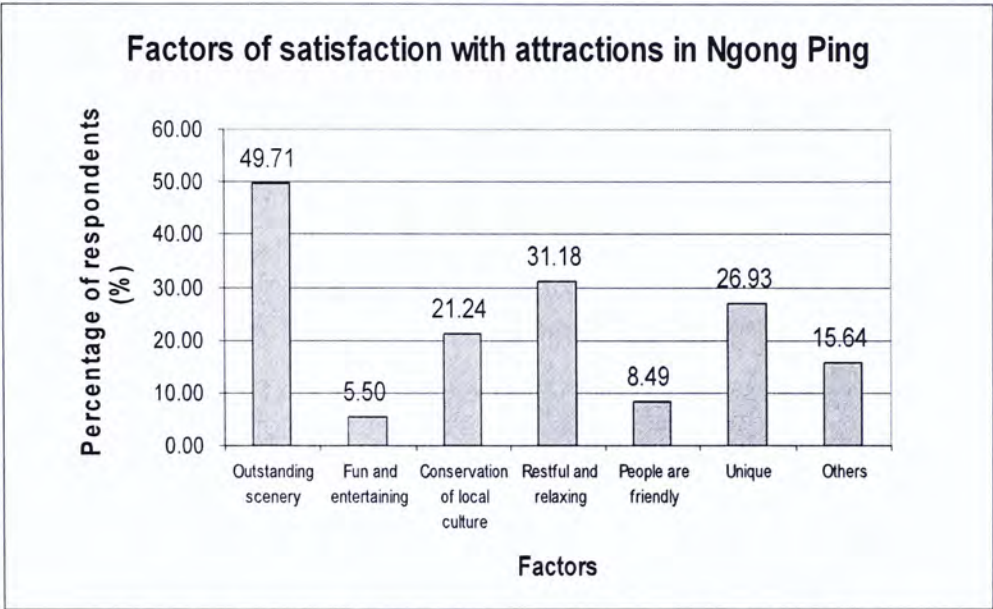


Figure 6.3 Factors of satisfaction with attractions in Ngong Ping

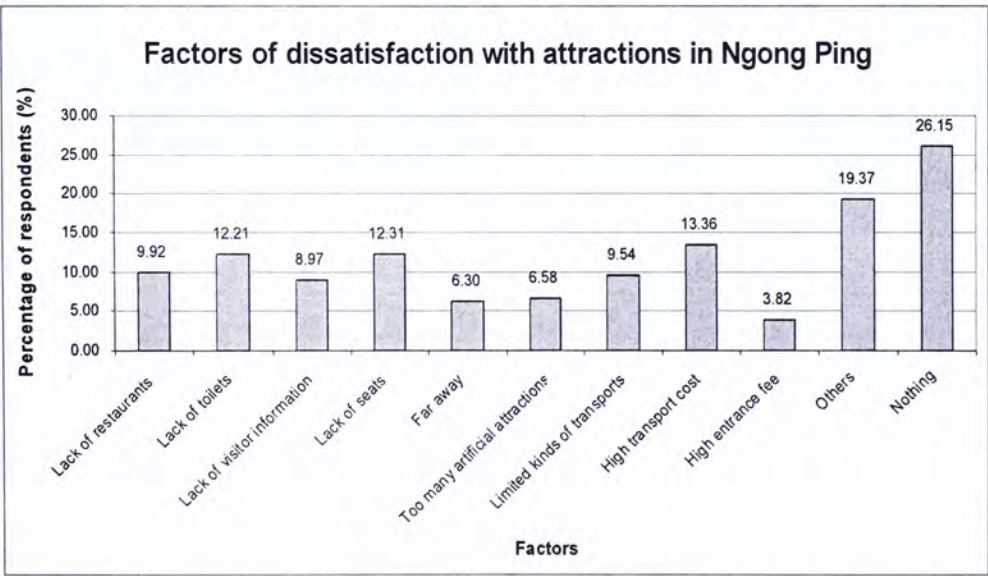


Figure 6.4 Factors of dissatisfaction with attractions in Ngong Ping

About 26% of respondents had nothing to dislike about the attractions in Ngong Ping. Most of the complaints however, related to the high transport cost (13.36%) for visiting the attractions. Other factors of dissatisfaction were related to the lack of supporting facilities like seats (12.31%), toilets (12.21%), restaurants (9.92%), transport (9.54%), visitor information (8.97%), etc., in the cluster. Besides, some respondents (6.58%) disliked the presence of too many artificial attractions. Others (19.37%) mentioned that there were too many people in the cluster making it too commercialized, and lacking of attractiveness.

Instead of individual attractions, Ngong Ping tourism cluster can be investigated as one whole unit. With the existing concentration of various attractions in Ngong Ping, tourists were asked to indicate whether they support the clustering or not (Table 6.6). A majority of respondents (78.1%) supported the clustering of tourist attractions, while 17.7% were against it. Most of those who supported the clustering (60.85%) felt that it was convenient for them to experience various kinds of attractions within the same area. Some (19.02%) agreed that time was saved for visit and traveling. At the same time, about 25% of respondents thought that more tourists would be attracted because of the provision of different attractions in the cluster area. Others (3.41%) mentioned that the cluster can provide more diversity and more revenue as a result.

Table 6.6 Perception on tourism clustering in Ngong Ping

	%		%
Support	78.1	Do not support	17.7
<u>Reasons</u>		<u>Reasons</u>	
<i>More convenient</i>	60.85	<i>Too many people</i>	20.20
<i>Save time</i>	19.02	<i>Environmental destructions</i>	13.80
<i>Can attract more tourists</i>	24.88	<i>Diversion of attractions allow tourists to visit various places</i>	21.89
<i>Others</i>	3.41	<i>Others</i>	7.74

For those against the clustering (21.89%), they suggested that diversion of attractions may allow tourists to visit various places instead of concentrating in

particular tourist spots. Some of them (20.20%) indicated that clustering would lead to the problem of over-crowding. In fact, 13.8% of respondents regarded that excessive clustering may cause destruction to the environment and disturbance to the natural habitats. Some others (7.74%) identified the issue of carrying capacity as a major concern in the area.

Table 6.7 Level of satisfaction with the experience in Ngong Ping

Level of satisfactions in Ngong Ping	Total %
<i>Very Dissatisfied (1)</i>	0.30
<i>Dissatisfied (2)</i>	0.70
<i>Average (3)</i>	21.30
<i>Satisfied (4)</i>	56.70
<i>Very Satisfied (5)</i>	21.00
Mean	3.97/ 5.00

Respondents were asked of their level of satisfaction for the visit to Ngong Ping as a whole (Table 6.7). The mean value scored 3.97, with a majority of respondents being satisfied (56.7%) or very satisfied (21%) with their experience in Ngong Ping. Besides, respondents were asked of their intention of revisit. A high percentage of respondents (68.3%) claimed that they would visit Ngong Ping again, while 15.9% said they would not and 15.8% were not sure. In other words, high degree of responses with the intention of revisit and high level of visitors’ satisfaction reflect the potential of Ngong Ping cluster to be sustained.

From the foregoing analysis, it is evident that there is the need to sustain the attractiveness of Ngong Ping for the sake of ST development. It is also clear that while many respondents appreciated the outstanding scenery as well as the unique and relaxing cultural atmosphere among other factors, some others lamented on the insufficient provision of supporting facilities. To this end, the issue of the protection of natural resources of the cluster and the incorporation of suitable human resources

to meet the need of ST development will be discussed in subsequent chapters.

In addition, specific attractions like The Big Buddha and Ngong Ping 360 scored high mean values in satisfaction levels. There was also a high degree of intention to revisit. Subsequently, how could tourists' level of satisfaction be guaranteed and enhanced for each attraction in the cluster as well as Ngong Ping as a whole, is a key concern to be considered in ST development and strategy formulation.

6.3 Understanding Sustainable Tourism

Tourists were asked of their understanding of ST so as to reveal their general attitudes towards ST. The understanding and knowledge of ST by the tourists will be useful in articulating the performance of the cluster in the context of tourism sustainability. Besides, educating the public and promoting the concept of ST is important for successful ST development.

As anticipated, most of the respondents (about 63%) did not know what "Sustainable Tourism" is, while only about 37% claimed that they know what it is. Further investigation was carried out to see if there were differences between those who understand ST and their nationality as well as education level. Tables 6.8a and 6.8b summarize the results which are statistically significant at 0.01 levels by using the Chi-square test. As shown in Figure 6.5a, most (47%) of those who knew the meaning of ST belonged to tourists from foreign countries. 37% of respondents are Hong Kong locals, and only 16% are tourists from China.

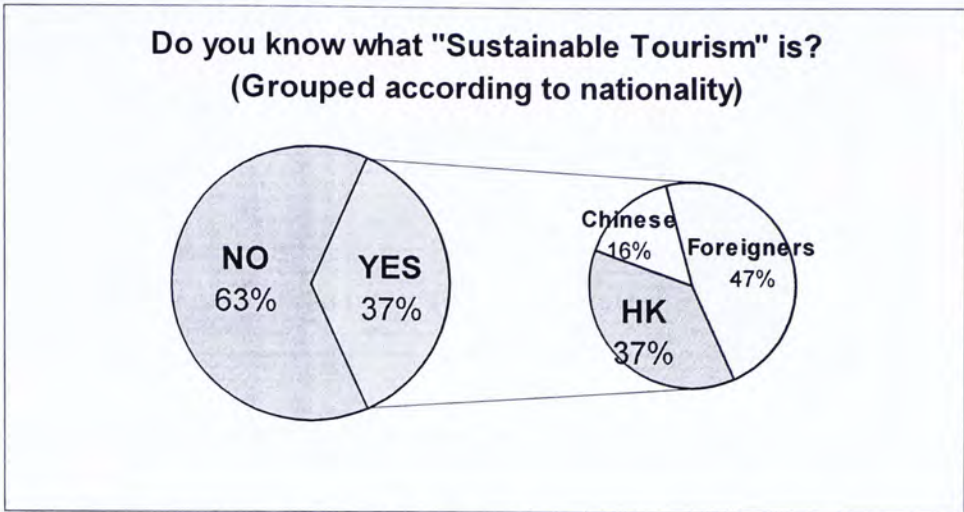


Figure 6.5a Percentage of respondents understanding ST (by nationality)

Table 6.8a Percentage of respondents understanding ST (by nationality)

	YES	NO	Chi-square test	
	%	%	Value	Sig.
HK	37.20	47.20	18.568	0.000
Mainland Chinese	15.70	19.20		
Foreigners	47.10	33.60		

With regard to the education level of respondents (Figure 6.5b), majority (64%) of them are highly educated with college degree or above. There was only a small proportion (4%) of them with education level below high school.

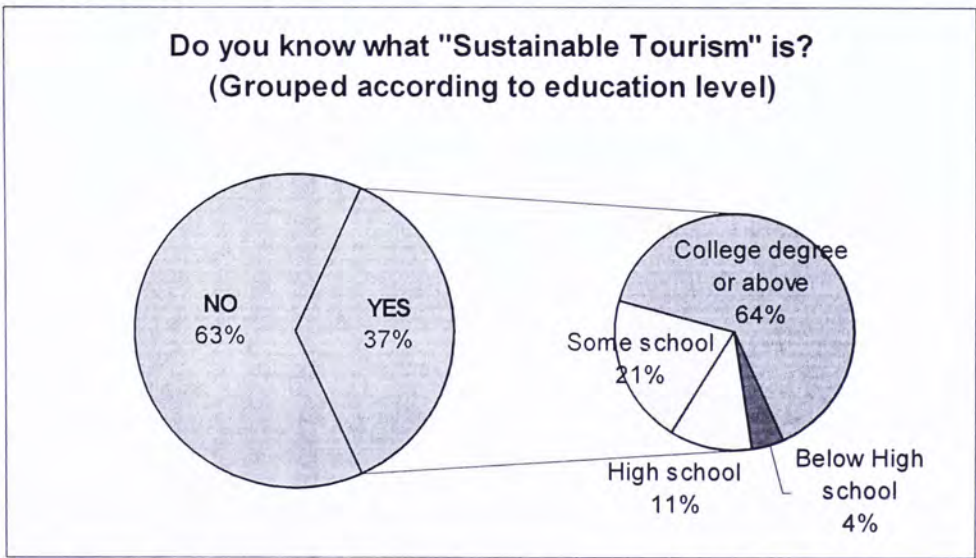


Figure 6.5b Percentage of respondents understanding ST (by education level)

Table 6.8b Percentage of respondents understanding ST (by education level)

	YES	NO	Chi-square test	
	%	%	Value	Sig.
Below High school	4.10	5.00	28.315	0.000
High school	11.10	19.50		
Some college	20.70	28.30		
College degree or above	64.10	47.20		

For those who claimed to know the concept of ST, they were further asked to define ST in open-ended answers. Simplified content analysis was undertaken and Table 6.9 summarizes the answers of respondents. The most frequent response (about 55%) was the “continuous development that can attract tourists to come again”. Others (about 22%) related ST development with environmental concerns. Conservation of cultural resource in addition to natural environment in the continuous development of tourism was also mentioned by some (6.55%) respondents. There were only a few respondents (0.85%) that considered ST as “conservation of the environment, local culture and economy in tourism development for the next generation”.

Table 6.9 Respondents' understanding of ST

	Respondents' understanding of ST	Summary of the understanding	Freq.	%	Rank
1	<i>continuous development that can attract tourists to come again</i>	ongoing tourism development which attracts repeat visitations	193	54.99	1
2	<i>tourism development that do not destroy the environment</i>	tourism + environmental and ecological conservation	77	21.94	2
3	<i>conservation of the environment and local culture in the continuous development of tourism</i>	tourism + environmental and ecological conservation + socio-cultural conservation	23	6.55	3
4	<i>sustainable development</i>	sustainable development	19	5.41	4
5	<i>do not destroy and over-develop the attraction and can be sustained</i>	destroy nothing + can be sustained	8	2.28	5
6	<i>attract tourism and do not destroy the existing</i>	tourism + destroy nothing	7	1.99	6
7	<i>expression of cultural features and attract tourists to come again</i>	tourism + socio-cultural conservation	7	1.99	7
8	<i>protecting the environment with economic growth</i>	environmental and ecological conservation + enhancing economic growth	6	1.71	8
9	<i>the economy can be sustained by tourism development</i>	tourism + enhancing economic growth	4	1.14	9
10	<i>conservation of the environment, local culture and economy in tourism development for the next generations</i>	tourism + environmental and ecological conservation + socio-cultural conservation + enhancing economic growth	3	0.85	10
11	<i>continue and last for generations</i>	sustain for generations	2	0.57	11
12	<i>conservation of culture, boosting of the economy and attract tourists to come again</i>	tourism + socio-cultural conservation + enhancing economic growth	1	0.28	12
		Total	350	100.00	

6.3.1 Contribution of tourism cluster in the context of Sustainable Tourism

As reflected from the results in Table 6.9, it seemed that most of the respondents were only trying to interpret the meaning of ST directly from its wordings. In addition, three more questions on the three pillars of ST (i.e. environmental, socio-cultural and economic aspects) in relation to the performance of the cluster in Ngong Ping were asked. It is recognized that tourists may not be familiar with the detail of impacts and changes of tourism on environmental, socio-cultural and economic aspects. Thus, instead of the details, general responses of tourists were collected and used in an effort to analyze the issue.

6.3.1.1 Environmental aspect

Respondents were initially asked if the attractions in Ngong Ping have adopted environmental protection measures (Figure 6.6a). More than half of respondents (56.5%) thought that the attractions have adopted certain kinds of environmental protection measures, while only 27% disagreed. Concerning the measures adopted, most respondents (68.74%) regarded that there was the conservation of natural habitats as reflected from greening and the use of fence to protect vegetation from further destruction. About 20% of respondents considered the provision of recycling bins with garbage classification as another measure adopted, and 9.5% noticed that there was the use of renewable resources. Besides, some others emphasized that the Ngong Ping Cable Car has made efforts in environmental protection during its construction phase, and considered it as one of the environmentally friendly transport systems.

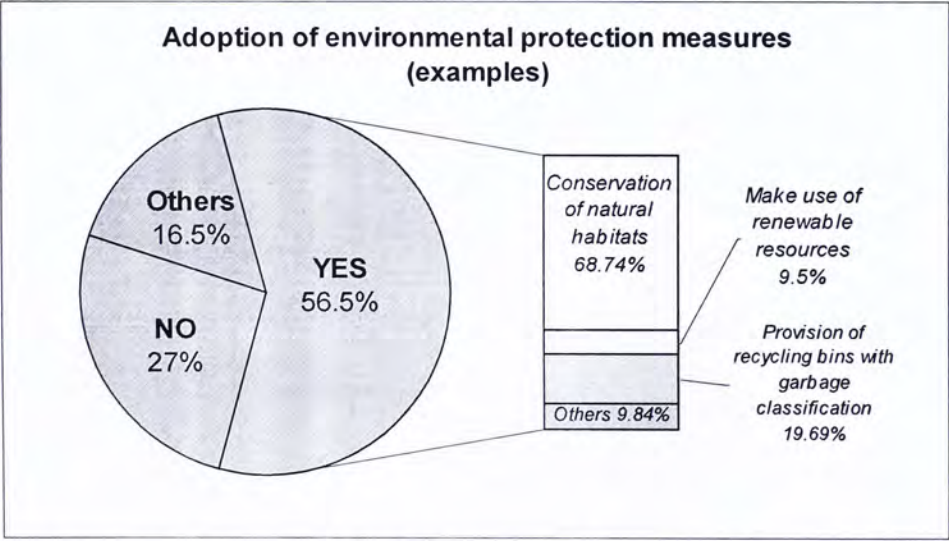


Figure 6.6a Visitors' responses on the adoption of environmental measures (examples)

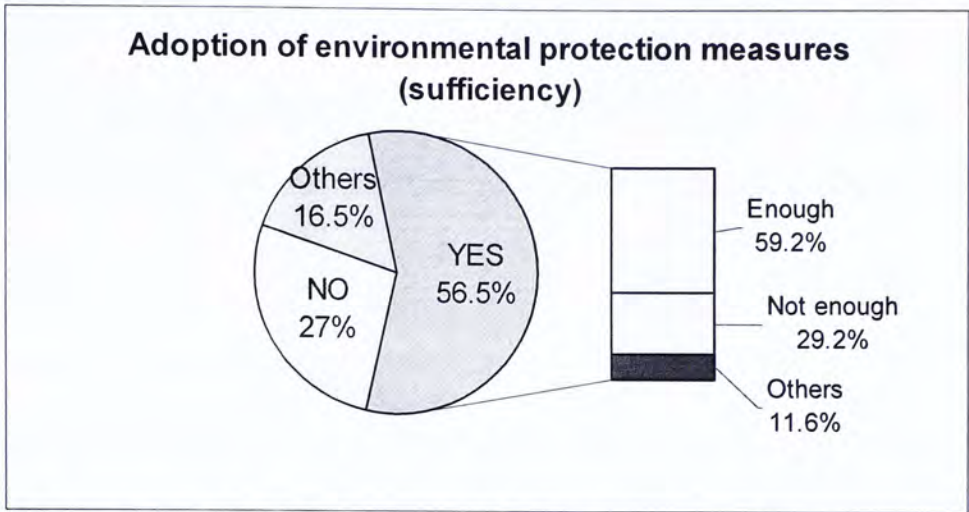


Figure 6.6b Visitors' responses on the adoption of environmental measures (sufficiency)

Nevertheless, as shown in Figure 6.6b, 29.2% of respondents thought that the environmental protection measures adopted were not enough. Other than greening and provision of recycling bins, some respondents recommended the addition of educational information or museum so that tourists may have more understanding on the environment of the cluster.

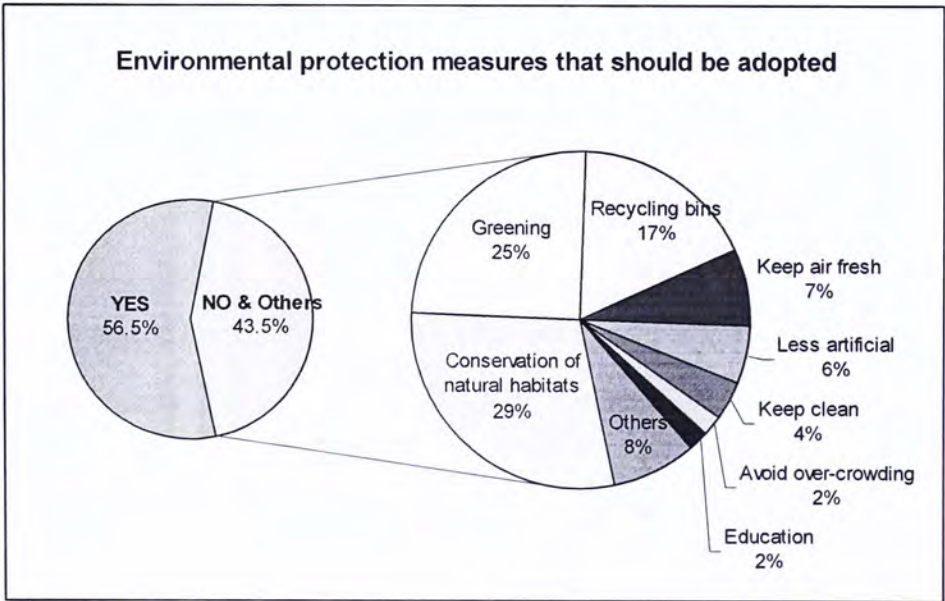


Figure 6.7 Environmental protection measures that should be adopted

Suggestions were given from those who did not see the adoption of environmental protection measures in the cluster (Figure 6.7). Similarly, most of the

respondents accepted that greening (25%) and conservation of natural habitats (29%) were necessary. Besides, keeping a clean environment with less artificial construction, and avoidance of over-crowding of visitors, are some additional measures that could be undertaken.

6.3.1.2 Socio-cultural aspect

Respondents were asked if the attractions have made contribution to the conservation of local culture (Figure 6.8). A large number of respondents (63.8%) thought that the attractions have contributed to cultural conservation. 68% considered that the most obvious conservation of culture in Ngong Ping was reflected from the religious aspect. As the area originated with long Buddhism history, tourist attractions and most of the construction were related to Buddhism. The combination of those attractions thus created a prominent spiritual atmosphere. Some respondents thought that The Big Buddha (6.3%) and Po Lin Monastery (6.3%) were well conserved with strong religious culture. The design and architecture (3.3%) of shops in the Ngong Ping 360 project as well as the Wisdom Path were viewed as a reflection of Chinese culture (8.8%). A limited proportion of respondents mentioned that the local stores (1.6%) and village (1.4%) were also well preserved.

It is expected that the local residents, who have witnessed the impacts and changes of tourism development in Ngong Ping, could provide different opinions with tourists. This will subsequently be investigated in a later section.

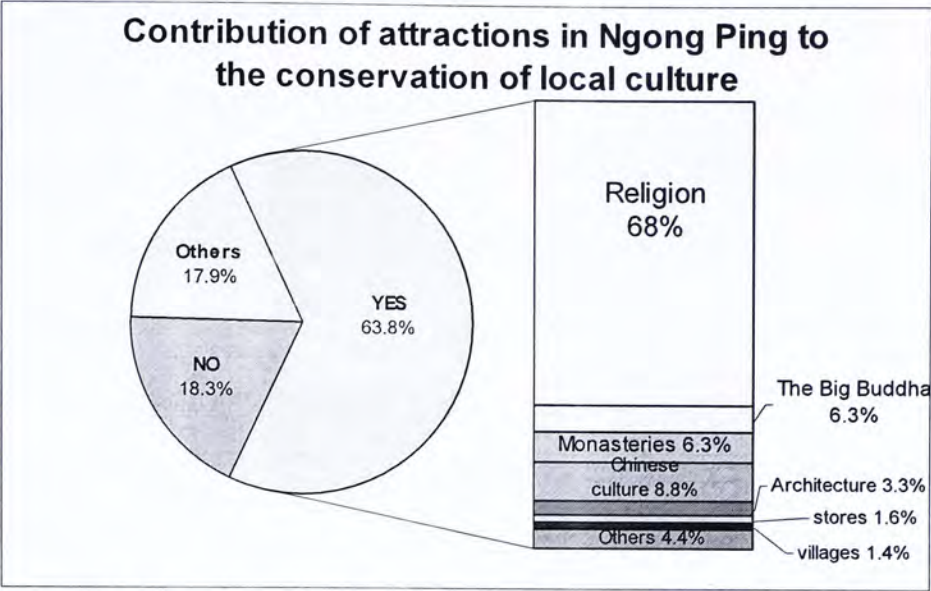


Figure 6.8 Contribution of attractions to the conservation of local culture

6.3.1.3 Economic aspect

The capability of attractions to provide long term economic benefits to the area is also essential to the successful development of ST. Although the actual economic benefit as a result of the cluster is to be known from tourism reports, perception of tourists may reflect the factors and situation affecting economic earnings. Respondents were asked if they consider the attractions in Ngong Ping can provide long term economic benefits for the area as well as Hong Kong. As summarized in Table 6.10, majority of respondents (78.1%) believed that the attractions can provide long term (5-10 years) economic benefits to Ngong Ping as well as Hong Kong. Following from that, a large percentage (81.69%) of respondents believed that earnings could be mostly generated from various tourism activities conducted in Ngong Ping. A total of about 6.7% (i.e. Cable Car: 3.35, The Big Buddha: 3.35) of respondents thought that with the presence of two famous attractions, more tourists would be attracted to Ngong Ping and thus the economy will be sustained for many years.

For those who felt that the attractions cannot provide long term economic benefits (13.2%) indicated that there was lack of new attractions (24.74%) and attractiveness (23.71%). Few of them thought the attractions in Ngong Ping were not special and attractive to deserve repeated visitation. Some respondents (11.34%) further commented that even though there were economic benefits generated, it would only last for a short term of two to three years. Some others felt that the lack of supporting facilities (4.12%) was also a disadvantage to the economic sustainability of the cluster.

Table 6.10 Capability of attractions to provide long term economic benefits

	%		%
YES	78.1	NO	13.2
<u>Reasons</u>		<u>Reasons</u>	
<i>Tourism activities</i>	81.69	<i>lack of new attractions</i>	24.74
<i>Cable car</i>	3.35	<i>lack of attractiveness</i>	23.71
<i>The Big Buddha</i>	3.35	<i>tourists will not come again</i>	15.46
<i>unique</i>	2.56	<i>can only last for short term</i>	11.34
<i>attractive</i>	2.17	<i>too commercialized</i>	6.19
<i>Concentration of attractions</i>	1.77	<i>lack of supporting facilities</i>	4.12
<i>others</i>	5.12	<i>others</i>	14.43

As revealed from the existing situation, most tourists are optimistic towards the provision of long term economic benefits of Ngong Ping cluster to Hong Kong. However, how to ensure and sustain the attractiveness and competitiveness of tourism cluster for long term economic gains is one of the major focuses in ST strategy formulation.

6.4 Investigation from the local community perspective

In-depth interviews with the local community were conducted in Ngong Ping between January and February 2007. As most of the monks did not accept interviews, residents were found in the area with houses for neither monks nor Buddhists. Nine local residents were successfully interviewed. Most of them have lived in Ngong Ping

for more than 40 years operating small businesses in the district. Their businesses are mainly running stores to sell souvenirs, beverages and snacks. The demographic profile of interviewees is summarized in Table 6.11. Five of the interviewees are storeowners as well as local residents of Ngong Ping for decades. Another one runs a business in Ngong Ping for more than 10 years. Two others are local residents with no businesses on the site. One interviewee has worked and stayed in Ngong Ping for most of the time for 2 years. Although they all appear to have something in common, various opinions toward tourism development were discernible.

6.4.1 Impacts of Ngong Ping tourism cluster in the context of Sustainable Tourism

Interviewees were asked if they support the existing tourism cluster development in Ngong Ping. From the responses, they could be divided into three groups (Table 6.11). Group 1 included five residents, who are also storeowners and opposed the existing tourism development strategy. They expressed many discontentments with the current tourism development, largely related to the competition of business and disadvantages arising from the Ngong Ping 360 project. In contrast, Group 2 consisted of interviewees, who are local residents that supported the current tourism development. They had relatively less contacts with other tourism businesses and simply enjoyed the benefits of the development. The last two belonged to Group 3, the storeowners. They are in a neutral position that supported and opposed the development from different perspectives. One of them supported the development which increased tourists' visits and business opportunity. On the other hand, they opposed the development as there were negative environmental impacts from the tourism development.

Table 6.11 Demographic profile of interviewees (local community)

Interviewee (Groups)	Gender	Age group	Occupation	Resident of Ngong Ping	Duration of working/ living in Ngong Ping	Support of existing tourism cluster development
Group 1 (NOT supportive of existing tourism cluster development)	Male	46-55	Storeowner	Yes	More than 40 years	No
	Female	66 <	Storeowner	Yes	More than 40 years	No
	Female	36-45	Storeowner	Yes	More than 40 years	No
	Female	36-45	Storeowner	Yes	More than 40 years	No
	Male	26-35	Keeper of hostel	No	2 years	No
Group 2 (Supportive)	Female	66 <	Retired	Yes	More than 10 years	Yes
	Male	36-45	Unknown	Yes	More than 10 years	Yes
Group 3 (Neutral)	Female	46-55	Storeowner	Yes	More than 40 years	Neutral
	Male	36-45	Storeowner	No	More than 10 years	Neutral

For clear understanding, responses were categorized into three groups, namely environmental and ecological impacts, socio-cultural impacts, and economic impacts. It aimed at revealing the performance of Ngong Ping tourism cluster in the context of tourism sustainability as seen by the local community.

6.4.1.1 Environmental impacts

All of the interviewees in Group 1 thought that the natural environment was seriously destroyed by the tourism cluster development. As most of them have lived in Ngong Ping for more than 40 years, they stated that various kinds of flora and fauna disappeared in the recent decades. Animals like small fishes, small crabs, Long-Footed chicken (*Lingshanya-Ying* chicken), etc. were lost. An interviewee said, “We could play with the fishes and crabs in the stream when we were children. It could no longer happen for our children” (Author’s interview, 29 January 2007). Plenty of trees were cut to provide flatland for development and extension of roads. Figures 6.9a to 6.9c show the change of land from forest before 2001 to construction

of attractions in 2004. The stream was adversely affected by the increasing number of visitors and further tourism development. Furthermore, the Ngong Ping scenery was largely altered with the addition of artificial attractions and tourism development at the cost of the green areas. Figures 6.10a to 6.10b show the replacement of green land by concrete.

On the contrary, some interviewees considered that improvement and protection were made during the tourism development. The local residents of Group 2 thought that more trees were planted and snakes, which threatened the safety of residents, were frightened away after the development. Another interviewee of Group 3 thought that measures for environmental protection were already adopted, and further commented that it was only the “*problem of green groups who always criticized too much*” (Author’s interview, 29 January 2007).

Most of the interviewees felt that Ngong Ping was becoming noisy with more tourist visits. One interviewee mentioned that there used to be only the sounds of drum and bell from the monastery during dusk and dawn in Ngong Ping. After the development of tourism cluster, he could only hear noise from the tourists. However, another resident felt that it became quieter because of the decreased number of scheduled buses to Ngong Ping as a result of the operation of the Cable Car.

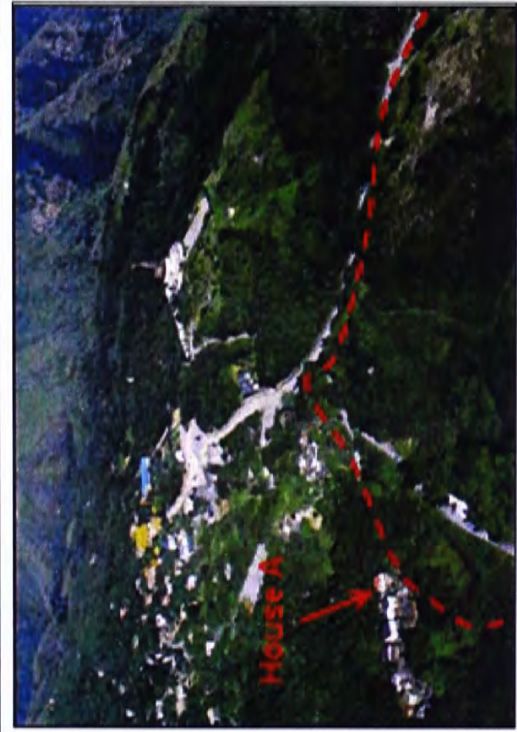


Figure 6.9a Ngong Ping before 2001
Source: Bartlett, 2001



Figure 6.9b Ngong Ping in 2004
Source: MTR, 2005



Figure 6.9c Ngong Ping in 2006
Source: Yeung, 2006



Figure 6.10a Ngong Ping before 1995
Source: Langford et al., 1995



Figure 6.10b Ngong Ping in 2007

With regard to waste treatment, interviewees were generally satisfied. The area was considered clean with the provision of sufficient recycling bins and regular cleaning. The only complaint was related to sewage treatment of the district. Despite the construction of the new Sewage Treatment Plant, sewerages from some of the village houses were not managed by the plant.

In addition, interviewees felt that the air quality of Ngong Ping was good, making it one of the attractiveness of Ngong Ping as stated by some residents. However, one of the interviewees observed that air pollution has become more serious, mainly caused by the cutting of trees and increasing number of construction works for the sake of tourism cluster development.

As reflected, most of the responses were negative towards the impacts of tourism cluster development to the natural environment. It seemed that there was limited contribution of the cluster to tourism sustainability in the environmental and ecological aspects as generally observed by the local community.

6.4.1.2 Socio-cultural impacts

Other than environmental impacts, socio-cultural impacts of tourism cluster development should not be underestimated. Though the transport networks between Ngong Ping and other parts of Lantau were improved, an interviewee said that the convenient transport facilitated tourists to visit other places instead of staying and spending more money in Ngong Ping. This, according to the respondent, adversely affected their businesses. Due to the expensive traveling cost, interviewees of Group 1 argued that the opening of Cable Car did not provide much convenience for them. It even caused inconvenience because of the decrease of public bus services.

More facilities like restaurants, public toilets, sewage treatment plant, etc., were

provided in Ngong Ping. Nevertheless, interviewees complained that all the facilities were provided for the sake of tourism development instead of providing convenience for the local community. For instance, the sewage treatment plant was newly built to cater for the increasing amount of sewage resulted from growing visits. In addition, some residents lamented that the government was only informing rather than consulting the locals about most of the tourism development projects.

Public security was one of the concerns for the community. Almost all of the interviewees agreed that the public security of Ngong Ping worsened. As one resident replied, *“We could just open the door and walk away for work with no worry in years before. Recently, we were just away for a minute, something would be lost”* (Author’s interview, 29 January 2007). With more tourists visiting, residents felt that the community was becoming more complicated.

When asking about the cultural development of Ngong Ping, a majority of interviewees thought that the local culture has changed with recent tourism development. Recently, because of the problems in obtaining Light Refreshment Restaurant License⁷, stores were not allowed to sell cooked food. Tourists would not be able to try some traditional desserts like bean curd in those stores. Most of the storeowners complained that the policy after the opening of Ngong Ping 360 did not favor them.

Another interviewee observed that the quiet and homogenous religious atmosphere would no longer be seen. While it was promoting the “Journey of Enlightenment” in Ngong Ping, with increasing tourism development, the district

⁷ In order to sell cooked food, storeowner must apply a restaurant license issued by the Food and Environmental Hygiene Department (FEHD). Light Refreshment Restaurant License is one of the restaurant licenses permits the licensee to prepare and sell for consumption on the premises of a limited range of food items (FEHD, 2000).

would become more commercialized as compared with the sacred image of Ngong Ping in previous years.

6.4.1.3 *Economic impacts*

One of the anticipated contributions of the Ngong Ping cluster development was to enhance the local economy. Interviewees of Group 1 indicated that they have not experienced the economic contribution brought by the tourism cluster. *“Though the number of visitors has increased, the number of business has not changed and even worsened after the opening of Ngong Ping 360”* (Author’s interview, 29 January 2007). Most of the owners of local stores felt worried as tourists preferred visiting and spending in the shops in “Ngong Ping Village” rather than the previously existing small stores. It was only the interviewees of Group 3 that felt their businesses have slightly increased as more tourists visit.

Because of the prohibition of cooking, stores could not sell cooked food which was one of the most profitable businesses. As a result, their businesses were inevitably decreased. It was more obvious during the weekdays. *“I cannot even make HK\$100 business per day!”* (Author’s interview, 29 January 2007). an old woman complained. Thus, one of the interviewees felt that the quality of life of the locals has also declined.

In general, the local community of Ngong Ping did not agree that the present tourism cluster development can contribute to long term economic benefits. One of the interviewees mentioned that the addition of attraction could only contribute to a small part of the whole economy. It would not contribute to long term economic sustainability of the region.

CHAPTER 7 DISCUSSIONS – DEVELOPING SUSTAINABLE TOURISM ON LANTAU ISLAND

Based on the results from the previous chapters, this chapter aims at further discussing the issue in accordance with the objectives of this research. In addition, the issue concerning the interpretation of ST is also discussed. The discussions are divided into five parts: (1) Review of tourism policies and development in Hong Kong and Lantau Island; (2) Interests of respondents; (3) Meaning of ST; (4) Potentials and limitations of Lantau Island for ST development; and (5) Performance of tourism cluster in Ngong Ping in the context of ST.

7.1 Review of tourism policies in Hong Kong and Lantau Island

As one of the major pillars of the Hong Kong economy, tourism industry possesses an influential role in the successful economic development of the region. More attention has been paid to the industry by the government in the last decade. It was emphasized in The Budget of 2004-05 “*to provide additional funding of about HK\$95 million for various tourism promotion and training activities*” (HKSAR website, 2005). In addition, formulation of tourism policies and planning is fundamental to this success.

Tracing back to the Year 1997, the Environmentally Sustainable Development Strategy (ESDS) for Hong Kong’s Travel and Tourism Industry was established and released in 2000. The Strategy was designed to propose practical measures based on environmentally sustainable principles for the industry members to sustain Hong Kong’s natural, cultural and economic environments for the future (HKTA, 2000). It

was generally arranged into four priority areas⁸. Each priority areas contain strategy, action plans and guidelines which highlighted and recommended actions that should be taken to achieve ST.

However, it was noticed by the researcher that the website of the ESDS⁹ could not be accessed in the period approximately between January to December 2006. The occasional suspension of the website reflects the inefficiency in promoting the strategy. Some interviewed stakeholders expressed indistinctness about the details of ESDS as well. It was also known that the majority of the travel and tourism industry refused to practice formal environmental management measures as recommended in the future (HKTA, 2000). Though ESDS has already provided a relatively comprehensive planning for ST development in Hong Kong, with the absence of effective management and monitoring system, practical actions adopted by the industry could not be ascertained.

The Tourism Commission was established in 1999 to formulate tourism policy and strategy, and provide focus for cooperation with tourism industry and to enhance coordination in developing tourism (TC, 2006). In 2000, the Commission on Strategic Development stated that it is necessary to further develop tourism industry so that Hong Kong can be established as “Asia’s World City” (HKPD, 2001a). A “Vision and Strategy Statement” called “Hong Kong Tourism: Expanding the Horizons”, which mapped out the blueprint for tourism development for the future, was set up in 2000. The vision for tourism development in Hong Kong is “to establish and promote Hong Kong as Asia’s premier international city, a world-class destination for leisure and

⁸ The four priority areas: (1) Environmental management; (2) Sustainable training, education and public awareness; (3) Facilitating exchange of information, skills and technology related to Sustainable Travel and Tourism development; and (4) Land-use planning and new tourism product development

⁹ Website of the ESDS: <http://www.hksustainabletourism.com>

business visitors” (TC, 2001).

However, the vision and strategy place an emphasis on positioning Hong Kong as an international city with a mix of eastern and western heritage and culture as well as a Kaleidoscope of attractions (TC, 2001), rather than a city developing environmentally friendly sustainable tourism with a mix of cultures and attractions. Also, the tourism development for sub-region of Hong Kong was still unclear.

To have a more organized planning for tourism development, the Tourism Planning Framework as one part of the “Hong Kong 2030 Study” was announced in 2001. There are generally five major planning principles for tourism planning (HKPD website, 2001a):

- (a) The integration of planning at all levels;
- (b) *The clustering of tourist attractions as the basic land use strategy that allows more efficient use of resources;*
- (c) *Prioritization and assessment given to individual projects according to their location with respect to the major clusters and the capacity of associated infrastructures and facilities;*
- (d) *ST development should be encouraged and promoted; and*
- (e) An integrated approach should be adopted to establish the general carrying capacity and the updating of major strengths and weaknesses for tourism development in different periods.

From the foregoing, items (b), (c) and (d) above are directly addressed in this study. The objectives and principles mentioned have provided an overall direction for tourism planning in Hong Kong. Adhering to that, the possible scopes for long term tourism development have been suggested (HKPD, 2001a). Countryside tourism and

heritage tourism are two of the scopes with increasing attention in the long term development. It is believed that the conservation and promotion of natural and cultural heritages may provide higher attractiveness in comparison with the concrete artificial buildings. The clustering concept was also recommended to link attractions through transport links and complementary design. From the Tourism Planning Framework of the Hong Kong 2030 Study, it appeared that the government began to be aware of the benefits of tourism cluster development and the importance of promotion of ST development.

Table 7.1 Major Tourism Projects

Completed Projects		Current Projects	
Name	Operation Date	Name	Scheduled Completion Date
Enhancement of the Sai Kung Waterfront	2003	<i>Being Implemented:</i>	
Lei Yue Mun Minor Improvements	2003	Enhancement of Dr Sun Yat-sen Historical Trail	End of 2006
A Symphony of Lights	Dec 2003	Visitor Signage Improvement Scheme	End of 2006
Avenue of Stars	April 2004	Pilot Scheme to Promote Green Tourism in Northeast New Territories	2007
Tsim Sha Tsui Promenade Beautification Project	August 2004	Stanley Waterfront Improvement Project	End of 2007
Central and Western District Enhancement Scheme	2005	Peak Improvement Scheme	End of 2007
The Wisdom Path	May 2005	Transport Link in Tsim Sha Tsui East	Early 2007
Hong Kong Disneyland	12 Sept 2005	Redevelopment of Ocean Park (Phrase I and Phrase II)	End of 2008 and 2010
Hong Kong Wetland Park	20 May 2006	<i>Under Planning:</i>	
Ngong Ping 360	18 Sept 2006	Aberdeen Tourism Project	
		Central Police Station, Victoria Prison and the former Central Magistracy	
		Development of a Piazza in Tsim Sha Tsui	
		Enhancement of Footbridges in Tsim Sha Tsui East	
		Lei Yue Mun Waterfront Enhancement Project	

Data source: Tourism Commission, 2006

Recently, series tourism policies and projects were implemented to stimulate the tourism market (TC, 2006). Table 7.1 shows some of the major tourism projects in the recent years. In spite of the outbreak of SARS in 2003, the tourism industry of Hong Kong quickly recovered after 2003. In 2000, the industry generated about \$62 billion of revenue, while it increased to more than HK\$100 billion in 2005 (HKSAR, 2005). The total number of tourists' arrival similarly increased from over 11.3 million in 1999 to over 23 million in 2005. The addition of new attractions to boost short-term tourism development sounded to be effective, while its ability to sustain for long-term development will have to be investigated.

One of the major issues was raised after the introduction of Concept Plan for Lantau Island in 2004. It proposed a cluster for conservation, tourism and recreation development on the island (HKPD, 2004). Consultations were made by the government which received pools of comments. On one hand, locating at the mouth of the Pearl River Delta with the operation of The Hong Kong International Airport, it is acknowledged that Lantau Island possesses the potentials and importance for economic and infrastructure development. On the other hand, most of the arguments concerned about the environmental destructions which may be caused by excessive construction of infrastructures on the ecologically sensitive Lantau Island. For instance, the proposed construction of the Hong Kong-Zhuhai-Macau Bridge, and the Logistics Park in North Lantau with an extensive reclamation was considered destructive to the natural environment (FoE, 2005). It manifests the significance of conserving the environment and ecological biodiversity on this valuable island of Hong Kong. At the same time, the importance of conserving cultural heritages on the island is another issue being raised. Because of the conflicting interests of various stakeholders, conclusion could not be made and the conflicts are not resolved after

more than two years debates.

7.2 Interests of respondents

Perception study is employed in this research to generate discussions from the opinions of three groups of respondents (Table 7.2). Each of them had different face values with diverse self-interests that result in conflicting debates regarding ST. Therefore, it is important to understand the standpoint and interests of each group of respondents before further analysis is made.

Table 7.2 Classification of respondents

Respondents		No. of respondents	Percentage (%)
Stakeholders (N=29)	Academics (A)	3	10.34
	Businessman (B)	9	31.03
	Government (G)	6	20.69
	NGO/ NPO (N)	11	37.93
Tourists (N=1,050)	Hong Kong locals	452	43.05
	Mainland Chinese	187	17.81
	Overseas visitors	401	38.19
Community members of Ngong Ping (N=9)	Group 1	5	55.56
	Group 2	2	22.22
	Group 3	2	22.22

Contradicting views were discernible from the responses of different types of stakeholders. Businessmen, especially those with significant interests in tourism development on Lantau Island, like Mass Transit Railway Corporation (MTRC) and Kwoon Chung Bus Group, take economic returns as primary concern in the development. The businessmen consider that profit-making could lead to the success of sustainable business and surviving the business is their main theme for ST development. Environmental and socio-cultural conservation are also important when it could contribute to the economic sustainability of the business.

On the contrary, NGO/ NPO hold opposing views from the businessmen. NGO/ NPO include green groups and some of the cultural and environmental protectionists of local communities on Lantau Island. They consider environmental conservation as profoundly important in contributing to sustainability. They believe that preserving the natural environment and cultural heritages which provide valuable interests could spontaneously contribute to tourism sustainability. Most of them are not as radical as some of the environmentalists who ask for environmental conservation but oppose any kind of development. They realize the necessity of development while asking for the protection and utilization of existing environmental and cultural resource, instead of discarding the existing and creating new attractions artificially. Furthermore, most of them support small scale development from the locals rather than top-down development by the government. As some of them are the residents of Lantau Island, they are eager to protect their culture and environment that could be developed in a way they consider more sustainable.

From the responses of government officials, it is obvious that they try to present themselves as holding a balance between environment, socio-cultural and economic aspects. The government considers the existing tourism planning and development as being on the path of sustainability given that all stakeholders are taken into consideration.

For the academics, they take neutral position with a comprehensive consideration of the whole situation. As the academics represent different disciplines, conflicting ideas are inevitable. Some of them emphasize the maintenance of natural and existing environment, whereas the others concentrate on the holistic ST planning and economic development of the region.

Tourists are often the passers-by in a destination. They are not familiar with most of the changes and impacts of tourism development on the destination. What they concern most is whether their experience in the destination can match their intrinsic motivation and be satisfied with the journey (Kaae, 2001). They may not worry about the issues of sustainability in all aspects but will be concerned if the destination is attractive to them and worth revisit. Therefore, their appraisals of the destination are influential in contributing to the tourism sustainability of the destination.

Local community members are eager about tourism development in the destination which is usually their homeland. Being the owners, they feel anxious about the protection of their assets including resources and the environment, as well as the benefits they could gain from such development. To this end, they would make efforts to sustain the tourism activities for the sake of the local community. Some of the residents look for economic benefits generated from tourism activities. Some others wish for the conservation of natural and cultural environment with minimum disturbance to their daily lives. Therefore, their perception on tourism development could be diverse with different interests. Nevertheless, all interests and opinions of local community members should not be ignored as they could determine the success or failure of ST in a destination.

7.3 Meaning and Conceptualization of Sustainable Tourism

Discussions are often raised for the interpretation of ST. With reference to Chapter 2 (Section 2.1.1), various definitions and interpretation of ST have been suggested since the discussion of the concept began in late 1980s. To date, there are still numerous definitions of ST defined from one's own perspective. Generally, three fundamental fractions of ST derived from sustainable development are identified:

conserving environment and ecological diversity, conserving local culture and be socially desirable, and sustaining economic development for generations. All these are considered vital in addition to providing tourists with quality experience. The stakeholders and tourists were asked in this study with open-ended questions to gauge their interpretation of ST.

Most of the definitions suggested by scholars (McCool *et al.*, 1998; Cottrell *et al.*, 2004) were similar: “environmental and ecological conservation”, “socio-cultural conservation” and “enhancing economic growth” are the three fundamental elements of ST as mentioned by stakeholders and tourists. With reference to the definition of ST suggested by UNWTO in 1993, it is akin to “*leading to management of all resources in such a way that economic, social and aesthetic needs can be fulfilled while maintaining cultural integrity, essential ecological processes, biological diversity and life support system*” (UNWTO website, 2004). Other key points highlighted by stakeholders like “participation of all stakeholders”, “balance between various aspects”, “sustain for generations”, etc, are similar to what literature suggested. For instance, it was also suggested by Eber (1992) that ST means “Tourism and associated infrastructure that, both now and in the future operate within natural capacities for the regeneration and future productivity of natural resources, recognizes the contribution that people and communities, customs and lifestyles make to the tourism experience, ...”. This further shows some similarities between the stakeholders and scholars (Eber, 1992; McCool *et al.*, 1998; Cottrell *et al.*, 2004; UNWTO, 2004) in interpreting the meaning of ST.

Nonetheless, to “keep visitors coming” mentioned by few stakeholders as well as “continuous development that can attract tourists to come again” stated by most of the tourists are not frequently noted by scholars (Eber, 1992; McIntyre, 1993; McCool *et*

al., 1998; Cottrell *et al.*, 2004; UNWTO, 2004). Regardless of the significance of the number of tourists' visit in ST, scholars (McCool *et al.* 1998; UNWTO, 2004) emphasized the quality of tourists' visit instead of the quantity. For example, it was expressed in the definition suggested by the UNWTO as ST that "meets the needs of present tourists" (UNWTO, 2004) and in the ST principles that "maintain high level of tourist satisfaction and ensure a meaningful experience to the tourists" (UNWTO, 2004). It is clear that most of the tourists with limited and thorough understanding of ST would easily construe it as an idea concerning the ongoing tourism development that attracts repeat visitations. As most of the tourists would only be concerned with their own perception and experience in the destination, it is normal that they could only mention it as the development that can attract tourists repeatedly.

Furthermore, it is believed that both the quality and quantity of tourists' experience should be accounted for in the definition of ST. It is the more number of visitors and higher frequency of visits that could sustain the tourism activities with customers and economic returns. It is also the quality of experience of visitors that attract and enhance the number and frequency of visits.

From the responses of stakeholders and tourists, many ideas were collected. It shows that ST is no longer confined to the traditional three dimensions of sustainability (i.e. ecological, cultural, and economic) but is an all encompassing issue.

7.4 Potentials and limitations of Lantau Island for Sustainable Tourism development

Potentials and limitations of Lantau Island for ST development is one of the major themes investigated in the study. From the results of SWOT analysis and

perception study with various stakeholders, at least seven potentials and six limitations of Lantau Island for ST development are generated. They are in the aspects of resources and attractions, capital, and policies.

7.4.1 Potentials of Lantau Island for Sustainable Tourism development

7.4.1.1 Natural and cultural resources with diversified attractions

The presence of abundant natural and cultural resources and attractions on the island provide lots of potentials for ST development. Natural resources are vital in ST development as the natural scenery and species of flora and fauna are unique from place to place making landscapes attractive. All stakeholders perceived the high value natural resources on Lantau Island as the strength for present as well as opportunity for potential ST development. The variety of fauna and flora species enrich the ecological environment of the island. The presence of aesthetic beaches and shorelines provides tourists with experiences along the coast. It is not only agreed by the stakeholders, but many tourists were attracted to the island and specifically Ngong Ping by its beautiful natural scenery.

Cultural resources are also important in ST development that reveals traditional features of destinations and may enhance cultural exchange. Cultural attractions include religious buildings and traditional villages like Tai O, in addition to symbols of modern culture like Tung Chung New Town. These provide a different picture for tourists to experience the speciality of Hong Kong. It is believed that preservation of Tai O traditional culture with suitable planning would contribute to sustaining tourism activities, improving local economy as well as preserving socio-cultural characteristics of Lantau Island. The Big Buddha, on the other hand, has attracted worldwide tourists to experience its magnificence and uniqueness.

Moreover, the purposely built attractions are believed to provide sustainable economic returns. Hong Kong Disneyland and Ngong Ping 360 were purposely built on the island to boost the local economy. They provide enjoyment for visitors of all ages including children, youngsters and elderly. In addition, Ngong Ping 360 provides a panoramic experience from the sky for tourists to appreciate the beauty of Lantau. All these diversified resources provide passive and active, traditional and modern, as well as “sea, land and sky” experiences that suit all kinds of tourists.

7.4.1.2 Improved transport networks

Transport networks are necessary in supporting successful tourism development of a region. The transport system of Lantau is improving continuously in recent decades and facilitates the rapid growth of development in Northern Lantau. The improved accessibility of distinct destinations attracts more individual visits. This is clearly shown in the case of Ngong Ping tourism cluster, which was once considered to be a remote area for travel. It is also agreed by stakeholders that improved transport networks could make visits to distant attractions easier.

Apart from the tourists, local residents could also gain from improvement in transport networks. More visitors would be attracted to the destination that local businesses may get more economic profits.

7.4.1.3 Availability of trails

All kinds of trails including hiking trails, tree trails, country trails, etc, favor the development of nature-based tourism, green tourism or ecotourism. Majority of stakeholders regarded that there are excellent possibilities for ecotourism on the island with its beauty and biodiversity as well as availability of trails. It was believed by some stakeholders (Author’s interviews, B08, 28 February 2006; N07, 04 March 2006)

and scholars (Butler, 1991; Clarke, 1997) that ST should be developed in small scale with limited number of visitors. Short trails on the island encourage the experience of close contact with the nature.

7.4.1.4 Distinct location: rural destination for leisure

Many attractions on Lantau Island are located in rural areas which are relatively far away from the urban districts of Hong Kong. This is considered by stakeholders as a potential for ST development.

Hong Kong is famous for its urban tourism with shopping and dining in the lively urban areas. Because of the presence of natural attractions in the relatively distinct rural locations, locals as well as visitors could escape from the busy urban areas for leisure and relaxation. This kind of disparity would further enhance the experience of visitors.

7.4.1.5 Environmental initiative of The Ngong Ping 360 Project

The Ngong Ping 360 Project is complimented by many stakeholders for efforts made on sustainability issues. The MTRC paid more attention on conserving the environment and local culture, satisfying local residents and tourists, as well as contributing to economic return on investment. In spite of numerous difficulties in construction on Lantau Island with consideration of balancing the conflicts between conservation and development, the project provides a fairly appreciated example for further development on the island. Moreover, the unique experience provided by Cable Car makes Lantau thriving with growing amount of tourists attracted.

7.4.1.6 Nature Conservation Policy

One of the fundamental elements of ST development is to protect the destination's resource attractions for generations. With rich amount of natural

resources on Lantau for ST development, implementation of nature conservation policy is necessary to secure the resource base. The New Nature Conservation Policy for Hong Kong was introduced in 2004 to provide more comprehensive strategy for regulating, protecting and managing natural resources in a sustainable manner (AFCD, 2005a). It pays more attention on the protection of private lands with high conservation value and 12 sites in Hong Kong were identified as priority sites. Although there is only one site (Tai Ilo) located on Lantau Island, the new policy demonstrated some efforts by the government in nature conservation, a task agreed upon by some stakeholders.

7.4.1.7 Benefits of tourism clustering for sustainability

It is agreed by stakeholders, tourists and local residents that tourism clustering would provide numerous potential for successful tourism development. With the proper use of its benefits, it may also contribute to the long term sustainability of tourism activities. To certain extent, an interviewee (Author's interview, G02, 17 March 2006) argued that clustering of tourism activities is necessary. As tourism cluster could provide guidance and scope for visits, so that the whole region would not be totally affected. This indeed, is essential to resources conservation. When tourism development is concentrated at specific sites, other districts could be protected from destruction. Furthermore, it is easier for management and allocation of resources.

Where a cluster exists, tourists may choose attractions according to their purpose and constraints of visits, which could maintain quality experiences that match the intrinsic motivation and recreational needs of tourists. As indicated by most tourists, the benefit of convenience is also a determining factor in attracting revisit. This was also acknowledged by local residents. Clustering may hence contribute to tourism

sustainability by attracting tourists continually.

From an economic perspective, operators of the cluster could benefit from economies of scale which saves the cost of production for long term development. Some stakeholders believed that it may not only attract more tourism operators to invest in the region, but also provide more social services as well as employment and economic benefits for the local community.

There is the presence of all these benefits of tourism clustering on Lantau Island. Some of the benefits mentioned may contribute to tourism sustainability of the cluster, while limitations like increasing pressure on the environment and ecosystem of the region should not be neglected. The issue therefore, is how the benefits could be utilized and drawbacks be minimized for the sake of ST development. This will be further illustrated in the following Chapter 8.

7.4.2 Limitations of Lantau Island for Sustainable Tourism development

7.4.2.1 Lack of long term vision and holistic planning

As reflected from the results, most of the stakeholders felt pessimistic towards existing tourism planning and policies. The fundamental concern is the vision and direction for long term ST development in Hong Kong. As highlighted by respondents, vision and principles drive the entire development. However, the existing tourism planning and development in Hong Kong and Lantau Island lacks the essential elements including vision, direction and leadership for ST development.

Although the government has produced a “vision and strategy” document as illustrated in Section 7.2, a number of stakeholders (Author’s interviews, B07, 01 March 2006; B09, 03 March 2006; A02, 06 March 2006; N09, 31 March 2006; N11, 11 April 2006) indicated that “the government has no vision” or is only “lip-talking”

with no commitment for ST development. It can be seen from the “vision and strategy” that there is lack of commitment on the issue of sustainability in the aspects of environment and communities in addition to economic and business development. The primary reason for that may relate to the lack of understanding and consensus on the idea of ST development between the government and stakeholders. Though a set of strategies for ST development in Hong Kong was released in 2000, it was not totally known and understood by tourism operators leading to difficulty in implementation.

With lack of vision and direction for ST development, principles are inevitably absent. The government does not have a clear and comprehensive framework and principles for ST development, but only a general SD planning for Hong Kong is being formed. Because of the absence of an inclusive long term planning and strategy for ST development, fragmented projects were often implemented. For example, when there was the downfall of economy, new attractions like Hong Kong Disneyland and Ngong Ping 360 were built. When there was the advocacy of nature conservation and green tourism, Wetland Park was established. When there was the trend of promoting cultural activities, the project of West Kowloon Cultural District was brought into discussions. All these projects seemed to be brought individually to solve existing problems with lack of consistency and overall planning for the future. This is an example of a fire-fighting approach which can only “cure the symptoms, but not the disease”.

7.4.2.2 Absence of guidelines and regulation for the implementation of ST practices

Tourism is not feasible for all places and there should be limits of acceptance for development in every destination. Guidelines are essential in delineating the scope for development and can be helpful to combat potential errors associated with rapid

development that may damage the environment from pressures (Eagles *et al.*, 2001). It was pointed out by many stakeholders (Author's interviews, B01, 01 March 2006; B07, 01 March 2006; B03, 03 March 2006) that the absence of guidelines for ST development made operators unclear of methods for implementation.

Regulation is one of the effective ways in monitoring the implementation of tourism policies. It is also helpful in ensuring the consistence of projects implemented while its absence made supervision of the industry difficult.

Besides, a set of sustainability indicators specifically for tourism development in Hong Kong was still lacking. This would inevitably affect the assessment of tourism sustainability progress in Hong Kong and Lantau Island. A set of indicators for general assessment of sustainable development in Hong Kong was suggested by the government (HKPD, 1998) but this may not be suitable for tourism sustainability assessment.

7.4.2.3 Lack of awareness and promotion of Sustainable Tourism

From the results of the survey in Ngong Ping, majority of tourists show ignorance in interpreting the meaning of ST. Although there is growing awareness on the issue of environmental protection, many people may not understand the concrete practices of ST. As observed by one stakeholder (Author's interview, A02, 06 March 2006) in this study, most of the public may only consider the need for providing recycling bins or increasing green areas. They may not truly understand the importance of doing those practices.

When comparing with overseas visitors, most of the Hong Kong locals did not show much concern on socio-cultural conservation. This is not only revealed in the interpretation of ST by respondents, but also by the responses of some respondents

during interviews in Ngong Ping. It was discovered that some Hong Kong locals not only neglect socio-cultural conservation as one of the important elements in ST, but also found it difficult in identifying the “culture” of Ngong Ping or even Hong Kong.

7.4.2.4 Lack of local community participation

Recently, most of the tourism development on Lantau Island were proposed and developed by the government or business corporations. The local communities were only involved in small part or even no participation in conception and planning. However, some stakeholders reminded that engagement of local communities is vital to the sustainability of local culture and tourism activities. This is so because tourists are attracted by the cultural characteristics instead of artificial tourism constructions (Author’s interview, B05, 14 March 2006). Local residents are considered to be most familiar with local characteristics that tourists are often interested in exploring historical stories of destination from them. As one stakeholder observed (Author’s interview, B03, 03 March 2006): “Tourists follow locals”. When the locals are satisfied, the nature and culture could be protected and tourists would be attracted. The tourism activities could then be sustained.

One of the major reasons for the lack of local involvement in tourism development is the deep-rooted concept of the importance of profit-making and money-earning in Hong Kong. As highlighted by the stakeholders interviewed (Author’s interviews, N08, 17 February 2006; B05, 14 March 2006), many youngsters on Lantau Island have moved to the urban areas for more profitable occupations.

In the case of Ngong Ping, there is limited number of local residents participating in tourism related businesses in the region. It may be on one hand due to the feature of Ngong Ping which is developed as a religious center. On the other hand, insufficient

support and disregard by the government is believed to be another reason. As discovered from the interviews with local residents, some residents are willing to participate in the tourism development. However, the government intended to introduce “big” corporations to ensure stable rental income, instead of encouraging the locals to operate businesses with local characteristics. Also, some local residents complained that they were neither consulted nor approached by the government, but were only informed.

7.4.2.5 Economic oriented development with many purposely-built artificial attractions

Digging into the “vision and strategy” suggested by the government, it is not hard to discover that the primary goal of the strategy is to boost Hong Kong economy by promoting tourism activities. As commented by stakeholders, it is considered by the government that with limited resources in the small area of Hong Kong, one of the ways to develop tourism promptly for economic benefits is by providing more attractions.

Nevertheless, excessive artificial attractions are not mostly welcomed by stakeholders and tourists. Various stakeholders stressed that ST should be concerned with conserving and sustaining the existing resources to satisfy the needs of tourists and the hosts for generations, rather than creating excessive attractions continuously. It was emphasized that *“The primary product of tourism is not something produced by the industry. The product is often the heritage, wealth, and expected legacy of the local community that serves as the tourist destination”* (ICLEI, 1999, p.3).

7.4.2.6 Did not utilize the benefits of tourism clustering

It was described that clustering of tourism resource may contribute to ST

development with the utilization of its benefits. Some of the benefits of clustering require the cooperation between each tourism unit. For example, cooperation of tourism units may take the advantage of economies of scale.

It was admitted by a representative of the Ngong Ping 360 project that there was no cooperation or connection with other tourism attractions in Ngong Ping or on Lantau Island for the sake of tourism sustainability. Also, the local community in Ngong Ping expressed that they did not cooperate with the others to look for mutual benefits in the context of ST. Despite the presence of potentials and advantages generated by tourism clustering for ST development, the disconnection among each unit could not benefit each other but raise conflicts and discontentment.

Promotion of individual attraction instead of Lantau Island as a whole would lessen the attractiveness and sustainability of attractions. Individual attraction like Hong Kong Disneyland or The Big Buddha may only attract certain kinds of visitors to stay on the island for just a few hours. With limited attractiveness, tourists may not be willing to spend high transportation cost and a long travel for visiting one attraction without unique experiences. However, the whole Lantau Island has a cluster of diverse attractions that could satisfy the needs of various tourists. The cluster could provide synergy that attracts tourists to stay and spend more. From the case of Ngong Ping, it is clear that the benefits generated from promoting the whole cluster are not utilized. Most of the tourists were attracted by individual attraction rather than the whole cluster. This would neither benefit individual attraction nor the cluster for long term sustainability.

7.5 Performance of tourism cluster in Ngong Ping in the context of Sustainable Tourism

The performance of tourism cluster in Ngong Ping was evaluated in accordance with the four fundamental elements of ST by perception study and collection of secondary data.. The results are further discussed and elaborated in the context of ST with reference to the simplified principles listed in Chapter 2 (Section 2.1.2).

7.5.1 Protection of the destination's resources attractions

Safeguarding the resources of the destination can ensure sustainable supply of resource for tourism development. There are at least three simplified principles of ST related to the environmental and ecological conservation. They are (1) Using resources sustainably; (2) Reducing over-consumption and waste; and (3) Maintaining diversity (Eber, 1992). Whether or not the tourism cluster in Ngong Ping is operated according to these principles may require further scientific measurement and investigation.

More than half of interviewed tourists felt that environmental protection measures were adopted in the Ngong Ping cluster. They observed that the cluster has undertaken greening and measures to conserve the natural habitats and tourism resources of the region. Yet, it is believed that tourists are not familiar with most of the environmental changes and impacts caused by tourism development on a destination (Cottrell *et al.*, 2004). Tourists could often notice the superficial environmental situation only as they stay at the destination for as short as just a few hours or slightly more.

Witnessing the changes of the destination, stakeholders and local residents had specific opinions compared with tourists. Some stakeholders observed that the Ngong

Ping Stream was polluted by tourism activities in Ngong Ping. One of the primary sources of pollutants was the oil from culinary activities discharged from Po Lin Monastery. The sewerage generated from the construction works of Ngong Ping 360 project was also considered as another source. Although there were damages resulting from the Ngong Ping 360 project, this was considered insignificant in relation to the overall development process.

7.5.2 Visitor satisfaction with their experience

Tourists are the major consumers of the tourism industry. The experience that tourists derived would greatly affect their perception for repeat visitation and willingness to recommend to others. Hence, maintaining quality experiences of tourists in the destination is essential in ST development.

Majority of tourists were satisfied with their experiences in Ngong Ping. It can be seen from the scores in the level of satisfaction with attractions in the cluster as well as Ngong Ping as a whole. Most of the tourists were attracted to Ngong Ping by the two major attractions, The Big Buddha and Ngong Ping 360. The Big Buddha has long been promoted as the major tourism attraction on Lantau Island with unique design and construction that attracts many Buddhist believers and tourists from all over the world. Yet, with limited excitement and additional attractiveness, it may not sustain for decades. It was noted that the number of visitors attracted to The Big Buddha decreased from 10,000 in 1993 to 1,000 per day in 2002 (Anonymous, 2002). Recently, Ngong Ping 360 has stimulated the market by attracting many novelty seekers since its opening.

The lack of promotion and provision of supporting facilities aroused many complaints and dissatisfaction by tourists. It further displayed the poor planning and

management of the whole Ngong Ping cluster which fails to cater for the needs of tourists. Most of the complaints were related to the insufficient supply of supporting facilities in the cluster. Indeed, facilities like seats, shading areas, toilets, etc, should all be adequately provided with comprehensive assessment on the demand of facilities and carrying capacity of the whole cluster before the construction of attractions. It is obvious that the assessment has not been well conducted or has only been undertaken for individual units rather than the whole cluster.

7.5.3 Residents assessment on tourism development

It was repeatedly stressed by stakeholders (Author's interviews, B04, 02 March 2006; B03, 03 March 2006; N07, 04 March 2006; N02, 08 March 2006; N03, 11 March 2006; B05, 14 March 2006) and scholars (McIntyre, 1993; ICLEI, 1999; O'Connor, 2003; UNWTO, 2004; Kilipiris, 2005) that the perception of local community members is crucial in ST development as the locals have many instruments at their disposal to influence development of the community which serve as tourist destination (ICLEI, 1999). The success of ST development would also imply the sustainable development of the local community. It shows the close and interdependent relationship between local community and ST development. It is also suggested that "involving local communities" and "supporting local economies" are two of the dominant principles of ST. Hence, the opinions and assessment of local residents on tourism development should not be neglected.

The local residents indicated that they welcomed tourism development in Ngong Ping but not the existing one which brought more damage than contribution to the community. Damage include deterioration of public security, increasing noise disturbances, alteration of the natural scenery, modification of local culture, development for the sake of tourists but not the locals, etc.

To the locals, economic benefits are indispensable in tourism development which sustains their basic daily livelihood. It is understandable that local residents took economic sustainability of the community as the prime concern in discussion. When the basic livelihood could not be ensured, it is unrealistic to request for other improvement. The livelihood of local residents, especially the storeowners, was mainly affected by the opening of Ngong Ping 360 which drove most of their customers away. The prohibition of selling cooked food has made things worse. This indeed revealed the problem of top-down planning instead of bottom-up planning which was encouraged by many stakeholders in ST development.

From the responses of local residents, existing tourism development in Ngong Ping received more criticism than applause, which has neither involved the local community nor supported local economy. In fact, most of the locals are willing to participate in ST development in Ngong Ping. They welcomed tourism development provided that their basic livelihood could be maintained and enhanced with minimum destruction. They also considered environmental and cultural resources as valuable assets for ST development.

7.5.4 Return on investment

Economic return on investment of tourism activities are mostly the main interest of tourism business developers. The feasibility of the economy to sustain and generate long term benefits in ST development is similarly important. This should be the care not only for investors, but also the local community.

There are indeed many ways to investigate the economic return on investment in the context of ST. At the macro level concerning the whole country or city, gross national product (GNP), gross domestic product (GDP), employment generation, etc,

are some of the indices usually adopted to indicate the economic impact and sustainability of tourism activities (Inskeep, 1991). At the micro or project level, cost-benefit analysis (CBA), hedonic pricing method (HPM), travel cost method (TCM), contingent valuation method (CVM), etc, are some other methods frequently applied by scholars (Inskeep, 1991; Israel, 1994; Wen, 1998; Lambert, 2003; Hsu *et al.*, 2005) in evaluating economic benefits produced in ST development within a period of time.

Nevertheless, time is needed to testify if the tourism activities could be sustained economically for periods. In the case of Ngong Ping, it is too early to judge if the cluster is performing well economically, as some key tourism units were just operated in a few months to two years. There is a lack of empirical evidence to show the economic sustainability of the cluster. Analysis could only be made based on the existing economic performance of the cluster to the investors and the community. Data adopted from secondary resources becomes the main source of information to identify if it is economic sustainable, while opinions collected from interviews could supplement for assessment.

Being a tourism cluster with several attractions intensively promoted by HKTB, most of the tourists believed that it can provide long term economic benefit for the community and Hong Kong. Stakeholders interviewed did not totally agree with that as long as it can maintain its attractiveness for decades. Meanwhile, existing information (Table 7.3) shows that individual unit may be able to sustain economically but not the whole cluster benefited.

At least five groups of tourism business or supporting service operators are economically directly affected by existing tourism development in Ngong Ping. They

are local storeowners in Ngong Ping, Skyrail-ITM and MTRC, Po Lin Monastery, New Lantau Bus Company Limited of the Kwoon Chung Bus Group, and Lantau taxi drivers. Among them (Figure 7.3), Skyrail-ITM (HK) and MTRC of Ngong Ping 360 seems to be the “winner” in the development at the moment with considerable economic return. There was an increase of total number of visitor with the revenues of HK\$64 million for the Ngong Ping 360 project until the end of 2006 (MTR, 2007). In contrast, taxi drivers and the Lantau Bus Company, which provided major transportation service on the island, suffered a lot from the sharp decrease in number of passengers. It is with no surprise as Ngong Ping 360 is run by big corporation with enormous support by the government while the others received relatively less support. The potential economic damage on small operators like taxi drivers and local storeowners were easily being overlooked. It is largely due to the incomprehensive planning and incorrect assessment of the potential economic impact of Ngong Ping 360 to other operators. Still, whether Ngong Ping 360 would enhance the economic sustainability of the Ngong Ping community, or could only generate benefits for itself is to be questioned.

Table 7.3 Economic impacts of tourism development in Ngong Ping

<u>Tourism attractions/ businesses</u>	<u>Owners/ operators</u>	<u>Economic impacts</u>	
		<u>Total amount of visitors/ Passengers</u>	<u>Income</u>
Ngong Ping 360	MTRC and Skyrail-ITM (HK)	The Secretary for Economic Development and Labour, Mr Stephen Ip Shu-kwan indicated that the <u>total number of visitors of Ngong Ping 360 has reached 1.4 million</u> since its opening in September 2006. (Anonymous, 2007b)	Ngong Ping 360 opened in September and <u>recorded revenue of HK\$64 million up to the end of 2006.</u> (MTR, 2007)
Po Lin Monastery and The Big Buddha	Po Lin Monastery	Since the opening of The Big Buddha in 1993, a total of 10 millions visitors were attracted to Ngong Ping. <u>After the opening of Hong Kong Disneyland, the number of visitors decreased for 40%.</u> (Wong, 2006). <u>The number of visitor to Po Lin Monastery decreased from 10 thousands to about 1 thousand per day currently.</u> It is a sharp decrease of about 90%. (Anonymous, 2002)	<u>After the opening of Ngong Ping 360, more visitors were attracted to Po Lin Monastery, but not an increase in income.</u> Because of the addition of attractions and choices in Ngong Ping 360, the duration of tourists staying in the monastery decreased. (Anonymous, 2007a)
Lantau Bus	New Lantau Bus Company Limited (Kwoon Chung Bus Group)	The number of passengers for the bus route between Tung Chung and Ngong Ping <u>on yesterday was 1,600.</u> It <u>experienced a sharp decrease when compared with that of 3,000 passengers on the same day of last year.</u> (Anonymous, 2006a) Due to competition from Ngong Ping 360, <u>number of passengers has decreased 60%.</u> (Anonymous, 2006b)	The income per day has <u>decreased for about \$30,000.</u> It is estimated that there would be <u>a loss of about \$10 million per year</u> (Anonymous, 2006b).
Local stores	Local residents	The <u>business of local stores is greatly destroyed after the opening of Ngong Ping 360.</u> Prohibition of selling of cooked food has greatly affected local's livelihoods. (Tong <i>et al.</i> , Oct, 2006)	"I cannot even make <u>HK\$100 business per day!</u> " an old woman complained. (Author's interview, 29 January 2007)
Lantau taxi	Local taxi drivers	Po Lin Monastery was once the major taxi drop-off point. Yet, there is no more business recently. <u>The business has dropped for 30%.</u> (Tong <i>et al.</i> , Oct, 2006)	The President of Lantau Taxi Association mentioned that <u>drivers used to gain \$400 per day for the route between Tung Chung and Po Lin Monastery while they had no business for that route on yesterday.</u> (Pui and Kok, 19/09/06)

CHAPTER 8 CONCLUSION

ST development is a complex and dynamic process involving the interplay of many stakeholders. Although at the early stage of ST development, this study attempts to seek for strategy and improvement for ST development in Hong Kong. With reference to the case of Lantau Island, potentials and limitations are identified for planning and improvement of ST strategy. With further investigation on the case of Ngong Ping tourism cluster, the existing performance of the destination is revealed and corresponding recommendations are made. This chapter aims at summarizing and concluding the key findings and providing suggestions generated from the study. Limitation of this research and recommendations for further studies are also illustrated.

8.1 Summary of findings

8.1.1 *Concept of Sustainable Tourism*

From the responses of stakeholders, most of them interpreted ST as a process which meets the needs of present and future visitors and local communities at the destination. While the environment should be protected, socio-cultural features should be conserved, and the economy developed. Some other vital elements included “participation of all stakeholders”, “balance between various aspects”, “sustain for generations”. Most of the stakeholders were educated or enthusiastic about ST development. Hence, their ideas about ST were akin to the concept and definition suggested by the UNWTO and other scholars (Eber, 1992; McCool *et al.*, 1998; Cottrell *et al.*, 2004).

Tourists in Ngong Ping were also asked of their understanding of ST. Most of the tourists were not familiar with the ST concept and interpreted it as ongoing tourism

development which attracts repeat visitations. As most of the tourists were not educated of the concept, they mostly put the focus on their perception and experience with the visit only.

It is also clear from the responses of stakeholders and tourists that ST is no longer confined to the traditional three dimensions of sustainability (i.e. ecological, cultural, and economic), but is an all encompassing issue.

8.1.2 SWOT of Lantau Island

Results of this research are generally derived from the perception of stakeholders, tourists, and local community members of Ngong Ping. With regard to the SWOT analysis, potential and limitations of Lantau Island for ST development are summarized in the following paragraphs.

Presence of abundant resources with improved accessibility provides the island with potentials to be developed as ST destination. It was agreed by most of the stakeholders, tourists and local community members that it can enhance the attractiveness of Lantau Island as a destination. It is one of the reasons that attract large amount of tourists who may revisit Lantau Island so as to sustain the tourism activities on the island. The provision of trails and improvement of transport networks of the island with high accessibility have additionally facilitate the travel to and within the island. Also, the distinct location of Lantau Island away from the bustle urban area naturally provides an advantage for ST development with large amount of undisturbed natural assets. This is reflected from the responses of stakeholders and some of the tourists interviewed in Ngong Ping.

As a new project covering the environmentally sensitive areas of Lantau Island,

the Ngong Ping 360 project provides a good example in seeking to balance conservation and development on the island. Together with the introduction of Nature Conservation Policy, it shows that the government and some private sectors are showing concern on the importance of environmental conservation in contributing to the success of ST development.

Tourism clusters are welcomed by stakeholders as well as tourists. According to respondents, the presence of clusters protects other areas from destruction and provides targets for tourists to choose from. Moreover, it provides economic benefits for operators with economies of scale that saves the cost of production. More tourists are also attracted by diversified attractions and possibly increase in tourists' spending.

On the other hand, limitations were discernible that may retard ST development. The fundamental limitation is the absence of long term vision and comprehensive framework for ST development in Hong Kong. This results in the absence of guidelines and direction for proponents to follow. With insufficient promotion and education, tourists and the public were not familiar with the importance of implementing ST practices. Local visitors showed more ignorance when compared with overseas visitors.

One of the vital principles of ST is the participation by local communities, which is clearly lacking in tourism development of Lantau Island. Instead, private sectors were employed with emphasis on economic benefits for the corporations rather than benefits for the locals. Neglect of the importance and insufficient support for local involvement in tourism development can thus threaten the tourism sustainability on the island.

Despite the benefits of tourism clustering, benefits were not utilized for the sake of tourism sustainability. It was admitted by the developers of an attraction and local residents in the Ngong Ping cluster that there was no cooperation between different developers. As various attractions in the cluster can complement each others while the attractiveness of one attraction is limited, promotion of individual attraction would lessen the attractiveness and sustainability.

8.1.3 Performance of Ngong Ping tourism cluster in the context of Sustainable Tourism

Further investigation was undertaken in Ngong Ping tourism cluster in the aspects of resources protection, visitors' satisfaction, residents' assessment, and economic returns.

Concerning the protection of the destination's resource attractions, it was observed by tourists that environmental protection measures were adopted although more can be done to ensure nature conservation. On the other hand, cutting of trees, discharge of sewerage, noise pollution, etc, were some of the negative impacts of tourism activities in the region as indicated by some stakeholders and local residents. The Po Lin Monastery and Ngong Ping 360 were considered as the sources of such pollution. At the same time, the Ngong Ping 360 project was praised by other stakeholders as showing an example of putting efforts for nature conservation.

With regard to satisfaction of visitors in Ngong Ping, majority of visitors were generally satisfied with their experiences and were mainly attracted by The Big Buddha and Ngong Ping 360. However, there were complaints about the inadequate supply of supporting facilities. The lack of information for visitors and lack of uniqueness of retail shops also disappointed some visitors. The highly

commercialized and economic oriented development was not totally welcomed by tourists who wished for a “Journey of cultural enlightenment”.

For the locals’ assessment on the existing tourism cluster development in Ngong Ping, it received more criticism than praise. It was mainly due to the damage caused by the addition of the Ngong Ping 360. Local residents of Ngong Ping witnessed various environmental destruction brought by the construction. Some considered the cultural atmosphere as no longer maintained. Among all those changes, competition of businesses from additional retail shops became the greatest grievance of the locals. In spite of the efforts in the tourism development, the locals were neither supported nor invited by the government. This made some locals disappointed thus showing negative towards further tourism development in the region.

As some attractions in Ngong Ping cluster were recently developed, analysis of economic returns was made based on the data collected from secondary data. Operators and owners of attractions in the cluster include Skyrail ITM (HK) and MTRC, New Lantau Bus Company Ltd, Po Lin Monastery, taxi drivers and local storeowners. At the moment, Skyrail ITM (HK) and MTRC of Ngong Ping 360 seemed to be the “winner” in attracting visitors and gaining revenue in comparison with other operators.

8.2 Strategy and recommendations for Sustainable Tourism development

As discovered from the investigation, existing tourism development of Hong Kong requires more improvement so as to proceed to the successful development of ST. This chapter aims at providing recommendation for the improvement and formulation of ST development strategy in Hong Kong. There are four sections of the recommendation: (1) Establishment of vision and principles for ST development with

holistic planning; (2) Promotion of tourism clustering; (3) Utilization of existing resources and encouraging local participation; and (4) Education, training and provision of sufficient supporting facilities. Each section is subdivided for further elaboration.

8.2.1 Establishment of vision and principles for Sustainable Tourism development with holistic planning

8.2.1.1 Reach consensus, set clear vision with all-inclusive planning

From the investigation, it is known that the idea of ST is vague in Hong Kong with conflicting arguments among stakeholders. This can be reflected from the discussion on the case of Lantau Island. Consequently, cooperation becomes impossible when there is no agreement and consensus among stakeholders. All stakeholders should be invited to express their concerns and understanding of ST. For instance, environmental and ecological conservation, socio-cultural protection, and economic development could be considered as fundamental elements of ST with equal proportion of importance. Other aspects like political consideration could be viewed as complementary in understanding the concept of ST development. With a consensus in interpreting ST and realizing its focus for development, stakeholders would be able to conclude with a shared vision and the formulation of an all-inclusive strategy for ST development. Early discussion with consensus could also avoid unnecessary debates on underemphasizing certain aspects of ST during the implementation of policies and practices.

When there is consensus on ST development, vision for ST development could be developed. Vision conveys the “future state and achievements required for tourism” (TRREC, 2004), thus providing a guide leading to successful ST

development for all stakeholders. The idea of developing the industry in a sustainable way should be clearly stated at the very beginning. It is stated that developing vision is the primary stage in tourism strategy planning process, followed by the development of goals, objectives, and finally the formulation of strategies (TRREC, 2004).

Vision for tourism development in local and regional levels of Hong Kong should also imply its aspiration for sustainability in all aspects. Existing tourism vision of Hong Kong is “to establish and promote Hong Kong as Asia’s premier international city, a world class destination for leisure and business visitors” (TC, 2001). Instead, the vision should be shown with a clear goal for the achievement of successful ST development in Hong Kong, concerning all aspects in sustainability for the sake of present and future generations. It should be a shared vision among stakeholders.

While the consensus and vision for ST development is developed, principles and objectives with an integrated planning strategy for ST development in Hong Kong could be generated. ST principles are essential in providing a framework which assists the government, private sectors and other organizations to apply the general idea of ST into practice (UNEP, 2005). This should also be derived from discussions among stakeholders or with reference to the ST principles suggested by international organizations.

With reference to literature and various initiatives, it is recommended that an integrated approach should be adopted for ST planning (Amatya, 1995; UN, 1999; UN, 2001; TRREC, 2004; Lavigne and Couture, 2005). Integrated planning is one of the management approaches used to address the complexity in ST development (UN,

2001). The multi-dimensional nature of ST development entails a kind of planning and management that brings together series of interests and concerns into a sustainable way of development.

It is realized that the existing tourism planning in Hong Kong is in a traditional top-down approach with insufficient flexibility, lack of strategic planning and vision, and poor linkage between formulation and implementation. An integrated and strategic planning approach for ST can link disparate tourism-related activities to an overall and broad strategic plan that can provide an integrated framework for development (UN, 1999). It is not only the planning and decision made by the government, but also encompasses the consultation and involvement of stakeholders including local residents. The stages of integrated planning adopted by the UN and shown in Figure 8.1 can be recommended to be followed to achieve successful ST development.

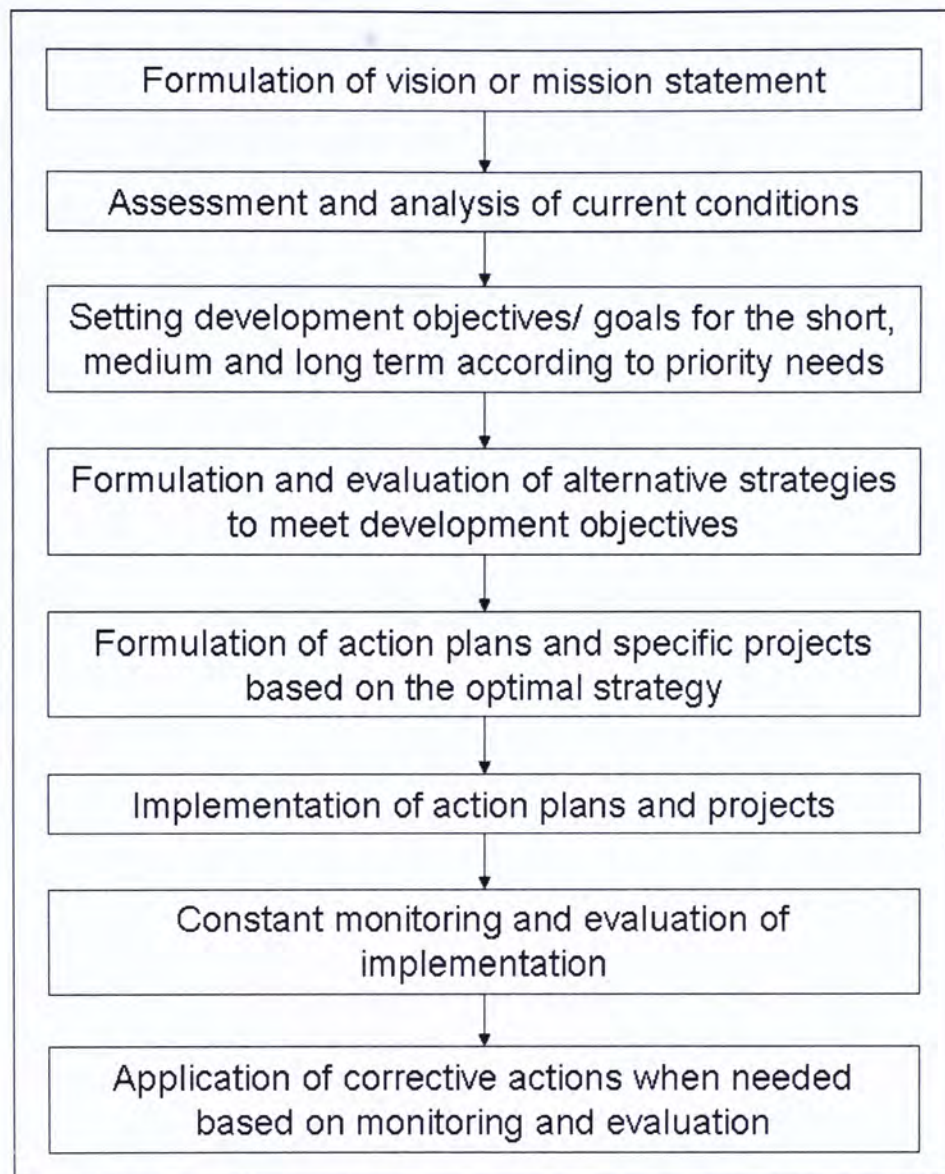


Figure 8.1 Steps of the integrated and strategic planning for ST development

Data Source: UN, 1999; UN, 2001

8.2.1.2 Conservation of natural environment as the primary principle

It is generally agreed that the natural environment provides invaluable resource with intimate relationship with ST development. It is not only the flora and fauna of the destination, but also the landscape with mountains and rivers that create unique and attractive scenic features for tourism development. Some existing areas on Northern Lantau with reclamation for economic or tourism development are already known to be threatened and natural habitats are being destroyed (GLA *et al.*, 1998). The destruction made on natural environment is often irrecoverable and becomes a

weakness in promoting biodiversity in ST development.

It is strongly recommended that conservation of natural environment should be considered as the primary principle in ST development (Author's interviews, N05, 24 February 2006; B08, 28 February 2006; B04, 02 March 2006; B09, 03 March 2006; N02, 08 March 2006;) As agreed by most of the stakeholders and tourists in this study, conservation of natural environment may significantly affect the sustainability of tourism activities. Tourism destinations could be threatened from local scale soil erosion or landslides, as well as global threats like global warming (Neto, 2002). While the economy and community can be retrieved, the natural environment may not be recovered. For the sake of tourism sustainability, conservation of natural environment should thus be taken as a prime concern.

8.2.1.3 Involvement of all stakeholders through consultation

Consultation aims at enabling the local authority and its community to exchange information and ideas on decisions and issues of concern (TRREC, 2004). It is a dynamic process that seeks advice and input from participants. An effective process of consultation should be able to provide reasonable opportunities for participants to express their views and exchange information.

As repeatedly highlighted by scholars (TRREC, 2004; UNWTO, 2004), successful tourism strategy should identify how to (1) welcome, involve and satisfy visitors; (2) achieve a profitable and prosperous industry; (3) engage and benefit host community; and (4) protect and enhance the local environment. Therefore, all stakeholders including representatives from the three key areas of tourism industry, community and environment, as well as strategic thinkers and tourism businesses representatives, should be invited for consultations in the planning process for ST

development in Hong Kong.

Already, it was discussed in Chapter 7 that each group of stakeholders may also have diverging opinions among its members. For instance, local community members were seen as influential group of stakeholders in ST development. Disputes often arise among members and it was observed by an interviewee that some of the residents were concerned about their own interests rather than that of the whole community (Author's interview, G02, 17 March 2006). Therefore, it may require independent agents, like universities or consultancy companies, to launch the consultation and make balance between the contradicting ideas of stakeholders to ensure fairness.

8.2.1.4 Using research and baseline information

As identified by stakeholders on Lantau Island as in other places, it is important to obtain baseline information for tourism planning and development (Author's interview, B04, 02 March 2006). Baseline information reflects the existing situation of the destination. This is necessary to facilitate impact assessment and decision-making that comply with the ecosystem approach (SCBD, 2004).

Environmental impact assessment (EIA) for major development projects in Hong Kong is already being done. Instead of such assessment for particularly one project in a designed destination, both consultants and stakeholders should contribute to the provision of relevant baseline information for the whole region where such development is proposed. This is necessary because the development of a destination would probably affect its neighborhood and assessment for the whole region could provide a more comprehensive picture for further development. To plan for the tourism development on Lantau Island in a sustainable way, it requires detailed

assessment with adequate baseline information of the whole island as well as specific destinations before embarking on further planning. With bulk amount of information, stakeholders and experts should also be involved in identifying the credibility and reliability of information.

According to the Guidelines on Biodiversity and Tourism Development, baseline information for ST development should basically and appropriately include information concerning past, present and future tourism planning in local, regional and national levels (SCBD, 2004). Some of the information required is listed in Figure 8.2. In addition to baseline information of the region, site-specific information for particular destination proposed for tourism development should be prepared in detail to assist impact assessment. Some of the detail requirement for site-specific information suggested by SCBD (2004) is listed in Appendix 11.

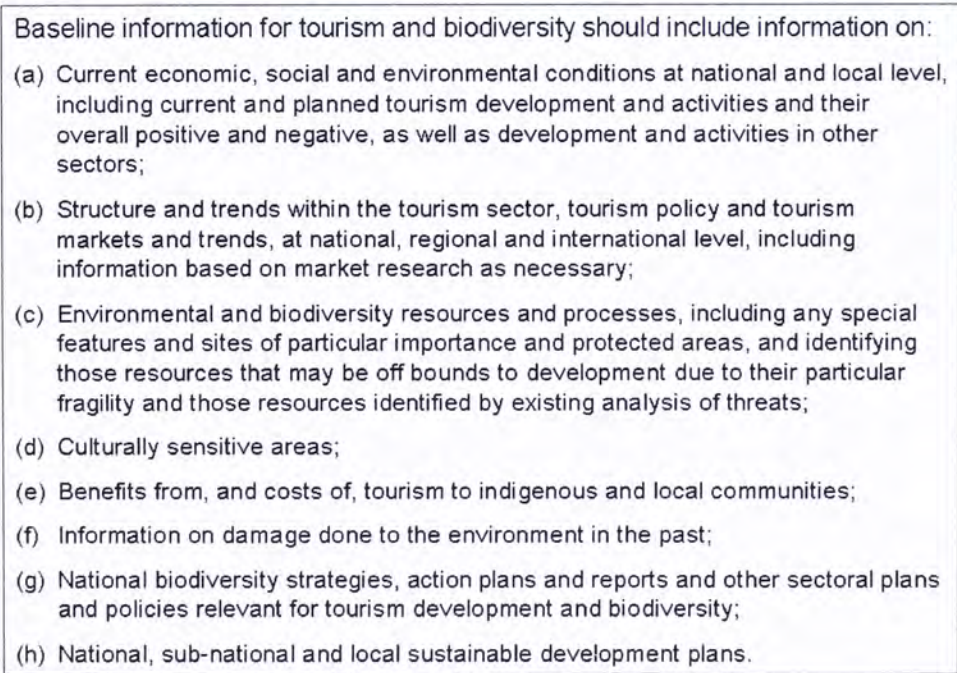


Figure 8.2 Baseline information required for ST development planning
Data Source: SCBD, 2004

assessment with adequate baseline information of the whole island as well as specific destinations before embarking on further planning. With bulk amount of information, stakeholders and experts should also be involved in identifying the credibility and reliability of information.

According to the Guidelines on Biodiversity and Tourism Development, baseline information for ST development should basically and appropriately include information concerning past, present and future tourism planning in local, regional and national levels (SCBD, 2004). Some of the information required is listed in Figure 8.2. In addition to baseline information of the region, site-specific information for particular destination proposed for tourism development should be prepared in detail to assist impact assessment. Some of the detail requirement for site-specific information suggested by SCBD (2004) is listed in Appendix 11.

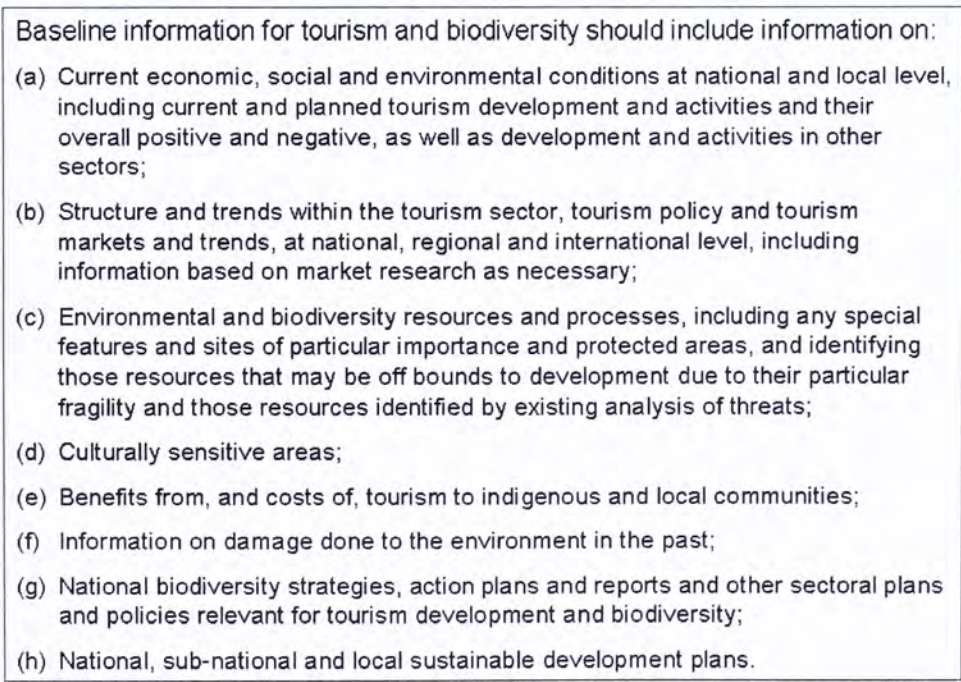


Figure 8.2 Baseline information required for ST development planning

Data Source: SCBD, 2004

8.2.1.5 Sustainable Tourism implementation and monitoring

To implement and monitor the progress of ST development, one of the tools providing framework for evaluation of existing and future development is indicators. Indicators are developed for evaluating choices made during developmental process and impacts made upon the natural and socio-economic environment (Farsari and Prastacos, 2000). Indicators for both existing destinations and future or planned destinations are required as the management and monitoring of a mature destination is different from that of a newly developed destination (Farsari and Prastacos, 2000). ST indicators suggested by UNWTO or set by other countries can be adopted as reference. Although they could not be totally applicable to the case of Hong Kong, it can be modified to suit the local needs. It can provide benchmarks for tourism managers to measure the performance of destinations that proceed for improvement and thereby increase the competitiveness and sustainability of destinations.

Benchmarking is a systematic procedure of comparative measurement with the objective to achieve continuous improvement (Wober, 2001). It has been proved by scholars (Voss *et al.* 1997; Mann *et al.*, 1998; Wober, 2001) that the use of benchmarks is effective in improving the performance of organizations. Wober (2001) has also developed a guide for tourism managers on benchmarking for tourism organizations which include profit-oriented tourism businesses, non-profit oriented tourism organizations and destinations. With reference to those developed by other researchers (e.g. Wober, 2001), it is suggested that a set of benchmarks for ST development in Hong Kong should also be formulated so that the performance of destinations could be monitored.

8.2.2 *Promotion of tourism clustering*

8.2.2.1 *Enhancing the attractiveness of destinations*

As mentioned by stakeholders, to anticipate whether tourism cluster could be sustained, it depends on whether it can maintain its attractiveness and if it can provide a unique experience (Author's interview, G02, 17 March 2006). This implies that the ability of a destination to provide attractive, unique and quality experiences to visitors is significant. It is believed that unique attractions could draw the attention of worldwide visitors who seek for novelty that could not be experienced in other destinations. While the natural resources and its setting could not be extensively modified and construction of new attractions are necessary, tourism planners can make use of the chance to enhance attractiveness and uniqueness.

With reference to the case of Ngong Ping cluster, local residents could be invited to operate retail shops selling handicrafts and souvenirs with local characteristics. Special vegetarian food or traditional desserts with unique recipes could be another selling point of the destination. Occasional changes of the products could stimulate repeat visitation especially by the Hong Kong locals. Instead of retail shops that could be seen all over the world, unique local stores are believed to be more attractive and sustainable.

8.2.2.2 *Enhancing sustainability by tourism clustering*

Benefits of tourism clustering should be utilized for the sake of tourism sustainability. Proper and inclusive promotion of the whole island for all kinds of visitors, rather than individual attraction for specific groups of visitors, is the key to ST development. It is recommended that the clustering of natural, cultural and purpose-built attractions on Lantau should be planned and promoted as a whole for

ST development. In the case of Ngong Ping cluster, the four major attractions together with local stores should cooperate to look for a more harmonious environment that the interests of each unit could be balanced.

To promote Lantau Island as a whole, supplementary policies are indispensable. As commented by one of the local community members, the “Tai O Pass and Ngong Ping Skyrail Package” was not well utilized and advertised. The discounting package can be extended from 1-day to 3-day. This kind of package can also be extended to traveling by taxis. Tourists would then be encouraged to travel around the whole island within a few days. They would lengthen the duration of tourists’ stay as well as their money spent. Livelihoods of drivers can also be ensured. Besides, special discounts can be given to the Hong Kong locals to encourage local visit.

8.2.3 Utilization of existing resources and encouraging local participation

8.2.3.1 Make use of existing assets instead of constructing artificial attractions

Hong Kong is seen as a concrete forest with manifold shopping and dining tourist spots, while its natural beauty is often overlooked. Instead of individual artificial attractions, the natural environment of Lantau Island is seen as the “Greenland of Hong Kong” that should be preserved and promoted.

As proposed by many tourists and stakeholders, instead of overbuilding artificial attractions, some of the natural assets and existing attractions could be utilized for ST development. Nature-based tourism or eco-tourism on Lantau Island should be encouraged with its supply of numerous natural assets and walking trails. With the plantation of tea plants in Ngong Ping, some local residents suggested that renovation and revitalization of Tea Garden can be considered as a new attraction. Tourists would be educated with the knowledge of tea plants as well as traditional tea culture in the

region. The abandoned Racecourse nearby can also be rehabilitated or slightly modified to become another new attraction.

Artificial constructions are sometimes essential in complementing ST development. The fundamental principle for that is the minimum disturbance to nature and its integration with the natural environment which presents a harmonious setting of the destination. For example, a small museum of tea could be built near the Tea Garden to illustrate the natural, cultural and historical features.

Other than natural resources, plenty of cultural resource could be found. Cultural resources include both tangible (e.g. monuments, archaeological artifacts, museum, art galleries, etc.), and intangible (e.g. customs, music, values, traditions, literatures, etc.) assets. With a mixture of Chinese and western cultures, promotion of cultural festivals in Hong Kong could be considered as opportunities for ST development not only on Lantau Island but in Hong Kong as a whole. For examples, performances and celebrations with Buddhist characteristics launched in Ngong Ping during the Buddha's Festival can be extensively promoted as one of the tourists' must-go activities.

8.2.3.2 Encourage more local communities' participation

It is recurrently emphasized by scholars (UNWTO, 1993; ICLEI, 1999; O'Connor, 2003; Kilipiris, 2005) and stakeholders (Author's interviews, B04, 02 March 2006; B03, 03 March 2006; N07, 04 March 2006; N02, 08 March 2006; N03, 11 March 2006; B05, 14 March 2006) that local involvement is one of the principles of ST development. Their participation can be in several forms including operation of tourism businesses or retail shops in the destination, being tour guides for local tours, providing useful information and constructive ideas in tourism planning process,

investing in tourism enterprises, etc. As local residents are mostly familiar with the region selected for tourism development, their opinions should be able to contribute to ST planning of the destination. With more participation and engagement in tourism development processes, local communities would be able to contribute to ST development as the sense of belonging is cultivated during their involvement.

Referring to the case study of this research, it is observed that most of the local community members are not employed or welcomed in the tourism development in Ngong Ping although they are willing to participate. Most of the interviewees agreed that the government may provide resources and suggestions in planning and management, while activities and businesses could be run by the locals or private developers. It is recommended that local residents can be invited as partners in restaurants or retail businesses in the development of the cluster. They should be given flexibility to develop tourism in the region so that the nature, culture and economy could be sustained by the locals. They can also be employed as tour guides or educational officers for visiting tourists and students, as well as maintenance and sanitation staffs of the cluster in essence providing job opportunities and economic benefits for the locals.

8.2.4 Education, training and provision of sufficient supporting facilities

8.2.4.1 Increase awareness on the importance of Sustainable Tourism development

To achieve successful ST development, it is not merely the efforts made by limited group of resource managers to conserve the natural and cultural resources, educating the public and the next generation about the importance of ST could also contribute to its success. Conservation of tourism assets to achieve ST development requires the cooperation of resource managers, tourism developers, local communities

and tourists. From the interviews and survey conducted in this study, it is recognized that the local community members and tourists may require more education on the issue of ST.

To increase the awareness and understanding of local residents on ST issues, interactive sessions and seminars as well as exhibitions or fairs could be launched in the communities and schools. Because of the complexity of the issue, the idea should be simplified with key concepts highlighted. Benefits of ST could be promoted among particular local communities affected by tourism development to seek for support and cooperation. Platforms like ST promotion group or web-based forum could also be developed to facilitate communication and discussion between communities and developers on the ST issue to seek for balance and win-win solutions on any possible conflicts discovered.

Leaflets or souvenirs distributed at the airport and visitor information centers can be utilized to raise tourists' awareness of ST. As the behavior of tourists could affect the protection of tourism assets at destinations, tourists should be told of their important cooperation in contributing to ST development. Tour guides and signage at destinations could further increase tourists' awareness on the issue.

8.2.4.2 Provision of tour guides and staff training

Tour guides play an important role in introducing the features and highlights of destinations as well as solving problems during the journey. In ST development, tour guides can assist in promoting the ST concept, enhance quality experience of tourists and provide job opportunities for the locals. From the investigation in this study, tour guides and visitor information are lacking. Then, the history and essence of the attractions and destination could not easily be realized. If it is intended to promote

ecotourism or nature-based tourism, which are sub-sets of ST practices, tour guides are also necessary in describing ecological and local knowledge to visitors. More tour guides should thus be provided for both natural and cultural destinations on Lantau Island and in Hong Kong as a whole.

To ensure tour guides and staff at the destinations could provide information accurately and vividly, training is essential. As pointed out by a stakeholder, the tour guides in Hong Kong do not fully understand the meaning of ST (Author's interview, N02, 08 March 2006). It is thus recommended that tour guides for all kinds of tourism destinations in Hong Kong should be trained with the ST concept in addition to basic tour guiding skills. These are expected to be the major group of people helping to educate tourists on the importance of ST verbally and actively.

8.2.4.3 Provision of sufficient supporting infrastructures and facilities

From the result of questionnaire survey with tourists in Ngong Ping, it is realized that most of the complaints were related to the inadequacy of supporting facilities in the destination. This is possibly due to the incomprehensive planning of the cluster in estimating the usage and demand for corresponding facilities on the destination. It is recommended that survey should be conducted with visitors to understand their perception and demand for facilities. Various facilities could then be provided to cater for all kinds of visitors. In addition to supporting facilities, signage to remind the public to protect the natural habitats is also necessary. Special facilities like elevator, for instance, may be needed for the elderly and those with disability arriving at the top of The Big Buddha. To do this, adequate investigations should be undertaken to ensure addition of facilities is within the carrying capacity of the destination.

Another relevant facility is visitor information centers. From the case of Ngong

Ping, many tourists noticed the absence of sufficient road signs and visitor information for them to visit Ngong Ping and other places on Lantau Island. Provision of clear and sufficient guide for visitors could enhance the quality of experiences. It is recommended that a well-planned and well-developed visitor information center can also be an opportunity for promoting ST development. A stakeholder (Author's interview, B06, 09 March 2006) indicated that the visitor center can indeed provide educational information in a more inspiring and interesting way rather than the presentation of information only.

8.3 Limitations of the study

Various limitations are found that restrained some parts of the investigation in this research. First, the absence of multidisciplinary team made larger and deeper investigation impossible. ST is a complex issue involving numerous aspects and can include disciplines like planning, environment, business, marketing, transport, hospitality, etc. With limited knowledge and resources, the researcher with a small group of helpers could only conduct evaluation in certain aspects instead of all aspects of the issue. Some of the aspects could not be examined in details to provide a more comprehensive picture.

Second, due to the limitation of time, only Ngong Ping cluster was chosen for investigation. Indeed, there are several tourism clusters found on Lantau Island worth studying. For instance, Tung Chung, Cheung Sha and Pui O, Mui O, etc. are some of the destinations that can be assessed for progress of ST development. Due to limited time for the research, it is hard for the researcher to study all sites on the island. With addition of tourism products in recent years, Ngong Ping was chosen while other destinations with mature tourism development like Tai O could also be further

investigated.

Third, it was often suggested by scholars (McCool *et al.*, 1998; Wight, 1998; Boyer *et al.*, 2004) that indicators should be used for measurement to obtain objective and quantified results in ST studies. However, the absence of a set of objective indicators and benchmark especially for ST development in Hong Kong made the measurement difficult. Also, the researcher could not be able to select a set of suitable indicators and standards for measurement within short period of time. Despite the necessity of interviews and survey to collect perceptual information, some of the evaluation may require accurate scientific measurement to realize the performance of the cluster.

Forth, it is acknowledged that the undertaken of perception study as a kind of qualitative research brings with it limitations that should not be ignored. In qualitative research, a small proportion of the population is interviewed while the representative and objectivity of the responses are taken into concern. It is inevitable that some certain groups of stakeholders are more influential. With limited source of contact information, there were only a small number of stakeholders selected for interviews.

Lastly, investigation of economic impacts could not be conducted at the moment, even with the recent opening of attractions in Ngong Ping. Economic development of destination is one of the influential dimensions for the success of ST while time is required to identify the contribution of such attractions. Consequently, secondary data were used for preliminary investigation on the economic impacts of the cluster.

8.4 Recommendations for further studies

ST development is an interesting issue that attracts attention from all over the world. In addition, tourism clustering in relation to ST development can inspire more insights for researchers to seek for tourism sustainability. With the intention to have better research in the future, the following points are recommended.

The interaction and connection between Ngong Ping and Tai O in ST development could be further investigated. Ngong Ping is particularly chosen in this research for its clustering of tourism resources with addition of new attractions. Indeed, Tai O and Ngong Ping are closely located which often attracts tourists to travel between the two destinations within a day. As observed by the researcher, the tourism development of Tai O and Ngong Ping would highly affect the sustainable development of each other as well as contributing to the ST development of the whole island. Studies about the ST development and the interdependence of these two destinations should be conducted to provide details for the utilization of resources and potentials derived from the existing situation.

Moreover, it is suggested by some stakeholders that Tai Ho is another destination with potentials for ST development. While it is still in the planning stage, studies could be carried out to provide more recommendation that facilitate successful ST development at the destination.

Furthermore, it is acknowledged by many scholars (Cluster Consortium, 1999; Ritchie and Crouch, 2000; Nordin, 2003; Jonker, 2004) that tourism clustering may contribute to tourism sustainability. In-depth research should be undertaken to understand the correlation between clustering and sustainability so that tourism resources could be planned and allocated for the sake of ST development in Hong

Kong. Indeed, the two concepts are still in their rudimentary stages of understanding and many uncertainties exist. However, it is valuable to integrate various methods including the use of indicators, benchmarking, interviewing, scientific measuring, etc. to examine such complex issues. As ST is a process instead of a final destination, longer periods of investigation with up to three to five or more years is required to reveal the changes and impacts of clustering on sustainability.

In fact, various tourism activities have already been developed in Hong Kong with most of those aimed for mass tourism or shopping and dining tourism. While these can be said to be at advanced stage, it could be interesting and important to investigate the possibilities and ways of developing those traditionally labeled as unsustainable forms of tourism practices, to be more sustainable and environmentally friendly practices.

BIBLIOGRAPHY

- Agriculture, Fisheries and Conservation Department (AFCD). (2005). *Country and Marine Parks*. Retrieved December 12, 2005, from http://www.afcd.gov.hk/english/country/cou_vis/cou_vis_cou_vis_cou_ls/cou_vis_cou_ls.html
- Agriculture, Fisheries and Conservation Department (AFCD). (2005a). *New Nature Conservation Policy*. Retrieved August 20, 2006, from http://www.afcd.gov.hk/english/conservation/con_nnep/con_nnep.html
- Agriculture, Fisheries and Conservation Department (AFCD). (2005b). *Walks and Trails*. Retrieved August 20, 2006, from <http://www.afcd.gov.hk/parks/trails/Eng/hiking/ctrail/ctrail.htm>
- Agriculture, Fisheries and Conservation Department (AFCD). (2006a). *Hong Kong Plant Database*. Retrieved October 20, 2006, from http://www.hkherbarium.net/Herbarium/C_search_intro.htm
- Agriculture, Fisheries and Conservation Department (AFCD). (2006b). *Lantau Trail*. Retrieved October 20, 2006, from <http://www.hkwalkers.net/longtrail/eng/ltrail/ltrail.html>
- Akis, S., Peristianis, N., and Warner, J. (1996). Residents' attitudes to tourism development: the case of Cyprus. *Tourism Management*, 17(7), 481-494.
- Allin, P., Bennett, J., and Newton, L. (2001). Defining and measuring sustainable tourism: building the first set of UK indicators. In J. J. Lennon (Ed.), *Tourism statistics: International perspectives and current issues* (pp. 163-174). London, New York: Continuum.
- Amatya, G. (1995). *Tourism planning in Hong Kong: a case study of Lantau Island*. Unpublished Dissertation for the degree of Master of Sciences (Urban Planning), The University of Hong Kong, Hong Kong.
- Andereck, K. L., and Vogt, C. A. (2000). The Relationship between Residents' Attitudes toward Tourism and Tourism Development Options. *Journal of Travel Research*, 39(1), 27-36.
- Anonymous. (2002, July 4). Construction of 5.5km Cable Car on Lantau Island (In Chinese). *Hong Kong Commercial Daily*.
- Anonymous. (2006a, October 2). Decline of theme attractions in Hong Kong (In Chinese). *Oriental Daily*.
- Anonymous. (2006b, October 21). Ngong Ping 360 and Lantau 100 as win-win solution

- (In Chinese). *Sing Pao*.
- Anonymous. (2007a, January 1). Po Lin Monastery proposes to charge entrance fee (In Chinese). *Oriental Daily*.
- Anonymous. (2007b, May 20). Proposal of 70 million to beautify Ngong Ping Bus Stop (In Chinese). *Sing Tao Daily*.
- Antiquities Monuments Office (AMO), LCSD. (2004). *Declared monuments in Hong Kong*. Retrieved December 10, 2005, from http://www.lcsd.gov.hk/CE/Museum/Monument/en/monuments_island.php
- Ap, J. (2006). *Capitalizing on Sustainable tourism: challenges and issues*. Paper presented at the Discovering Green and Heritage Tourism, Hong Kong.
- Ap, J., and Sit, C. K. (2005). *Sustainable tourism development guide for Hong Kong (Draft)*. Hong Kong: The Hong Kong Polytechnic University.
- Asia World-Expo Management Limited (AWEML). (2006). *Asia World Expo: Fact sheet*. Retrieved February 10, 2006, from <http://www.asiaworld-expo.com/newsRoom/factSheet.aspx?lang=enUS>
- Bao, J., and Chu, Y. (1999). *Tourism Geography*. Beijing: Higher Education Press.
- Bartlett, K. (2001). *Over Hong Kong* (Vol. 6). Hong Kong: Pacific Century Publishers.
- Baysan, S. (2001). Perceptions of the environmental impacts of tourism: a comparative study of the attitudes of German, Russian and Turkish tourists in Kemer, Antalya. *Tourism Geographies*, 3(2), 218-235.
- Benfield, R. W. (2001). Good things come to those who wait: sustainable tourism and timed entry at Sissinghurst Castle Garden, Kent. *Tourism Geographies*, 3(2), 207-217.
- Beni, M. C. (2003). *Globalizacao do turismo: megatendências do setor e a realidade brasileira*. Sao Paulo: Aleph.
- Berry, R. S. Y. (1999). *Collecting data by in-depth interviewing*. Paper presented at the British Educational Research Association Annual Conference, Brighton.
- Berry, S., and Ladkin, A. (1997). Sustainable tourism: a regional perspective. *Tourism Management*, 18, 433-440.
- Biodiversity Group of AFCD. (2005). *Hong Kong ecomap*. Hong Kong: Friends of the Country Parks, Bosmos Books.

- Bloyer, J. M., Guske, L. D., and Leung, Y. (2004). Indicators for sustainable tourism development: crossing the divide from definitions to actions. In F. D. Pineda and C. A. Brebbia (Eds.), *Sustainable Tourism* (pp. 109-115). UK: WIT Press.
- Bramwell, B., and Lane, B. (1993). Sustainable tourism: an evolving global approach. *Journal of Sustainable Tourism*, 1(1), 1-5.
- Brunt, P., and Courtney, P. (1999). Host perceptions of sociocultural impacts. *Annals of Tourism Research*, 26(3), 493-515.
- Business Environment Council (BEC). (2004). *Coalition on Sustainable Tourism*. Retrieved November 30, 2005, from <http://www.bec.org.hk/customPages/The%20Coalition%20of%20Sustainable%20Tourism.php>
- Butler, R. W. (1991). Tourism, environment, and sustainable development. *Environmental Conservation*, 18(3), 201-209.
- Butler, R. W. (1993). Tourism: an evolutionary perspective. In J. G. Nelson, Butler, R.W., and Wall, G. (Ed.), *Tourism and sustainable development: Monitoring, planning, managing* (pp. 27-43). Waterloo: University of Waterloo, Department of Geography.
- Butler, R. W. (1998). Sustainable tourism - looking backwards in order to progress? In C. M. Hall and A. A. Lew (Eds.), *Sustainable Tourism: A Geographical Perspective* (pp. 25-34). UK: Longman.
- Carter, R., & Fabricius, M. (2006). *Introduction to Destination Management*. Paper presented at the World Tourism Organization Seminar, Addis Ababa.
- Census and Statistics Department (CSD). (2002). *Hong Kong Statistics*. Retrieved August 15, 2006, from <http://www.censtatd.gov.hk/>
- Ceron, J. P., and Dubois, G. (2003). Tourism and sustainable development indicators: the gap between theoretical demands and practical achievements. *Current Issues in Tourism*, 6(1), 54-75.
- Chan, A. H. (2003a). *Residents' perceptions towards Hong Kong Disneyland and its impacts*. Unpublished Thesis for the Master of Philosophy, The Hong Kong Polytechnic University, Hong Kong.
- Chan, H. Y. (2003b). *Community Planning for Sustainable Tourism in Hong Kong, Case study: Tai O fishing village*. Unpublished Dissertation for the Degree of Master of Sciences (Urban Planning), The University of Hong Kong, Hong Kong.
- Chan, N., C., (2007). *Decline of tourism in Macau (In Chinese)*. Hua Qiu Bao.

- Cheng, H. P. (1992). *A study on the balance of residential development, nature conservation, and outdoor recreation activities in Lantau: An application of AIDA to strategic decision making process*. Unpublished Dissertation for the Degree of Master of Sciences (Urban Planning), The University of Hong Kong, Hong Kong.
- Choi, H. S. (2003). *Measurement of Sustainable Development progress for managing community tourism*. Unpublished PhD Dissertation, Texas AandM University.
- Choi, H. S., and Sirakaya, E. (2005). Measuring residents' attitude toward sustainable tourism: Development of sustainable tourism attitude scale. *Journal of Travel Research*, 43(May 2005), 380-394.
- Cicerchia, A. (2003). *Measures of sustainability: Take tourism, for instance*. Paper presented at the Atti del IV Convegno nazionale dei sociologi dell'ambiente, Torino.
- Civic Exchange. (2006). *Our place - Our time, Hong Kong's unique asset: Our rural land*. Hong Kong: Civic Exchange.
- Clarke, J. (1997). A framework of approaches to Sustainable Tourism. *Journal of Sustainable Tourism*, 5(3), 224-233.
- Cluster Consortium. (1999). *The South African Tourism Cluster: Strategy in Action* (Unpublished report prepared for the Tourism Clustering Initiative). Johannesburg.
- Coates, G. (2004). *A Vision for the Silvermine Bay Waterfront*. Hong Kong.
- Coccossis, H., and Nijkamp, P. (1995). *Sustainable Tourism Development*. Aldershot: Avebury Press.
- Conservancy Association (CA). (2005). *Comments on "Concept Plan for Lantau"*. Hong Kong: Conservancy Association (CA).
- Cottrell, S., Duim, V. R. v. d., Ankersmid, P., and Kelder, L. (2004). Measuring the sustainability of tourism in Manuel Antonio and Texel: A tourist perspective. *Journal of Sustainable Tourism*, 12(5), 409-430.
- Cruz, R. G. (2003). *Towards Sustainable Tourism Development in the Philippines and Other Asean Countries: An Examination of Programs and Practices of National Tourism Organizations (PASCN Discussion Paper No. 2003-06)*. Philippines: Philippine APEC Study Center Network.
- De Kadt, E. (1992). Making the alternative sustainable: Lessons from the development of tourism. In V. L. Smith and W. R. Eadington (Eds.), *Tourism Alternatives: Potentials and Problems in the Development of Tourism*. Philadelphia: University of Pennsylvania Press and the International Academy for the Study of Tourism.

- Democratic Alliance for the Betterment and Progress of Hong Kong (DAB). (2006). *Sustainable Development on Lantau Island*. Hong Kong: Democratic Alliance for the Betterment and Progress of Hong Kong (DAB).
- Deng, J. Y., King, B., and Bauer, T. (2002). Evaluating natural attractions for tourism. *Annals of Tourism Research*, 29(2), 422-438.
- Deng, J. Y., Qiang, S., Walker, G. J., & Zhang, Y. Q. (2003). Assessment on and perception of visitors' environmental impacts of nature tourism: a case study of Zhangjiajie National Forest Park, China. *Journal of Sustainable Tourism*, 11(6), 529-548.
- Donohoe, H. M., and Needham, R. D. (2006). Ecotourism: The Evolving Contemporary Definition. *Journal of Ecotourism*, 5(3), 192-210.
- Doratli, N., Onal, S., and Fasli, M. (2004). An analytical methodology for revitalization strategies in historic urban quarters: a case study of the Walled City of Nicosia, North Cyprus. *Cities*, 21(4), 329-348.
- Drainage Service Department (DSD). (2006). *Sewage Treatment Facilities*. Retrieved August 15, 2006, from http://www.dsd.gov.hk/sewerage/our_sewage_treatment_facilities/index_UID_92.htm
- Dudgeon, D., and Corlett, R. (2004). *The ecology and biodiversity of Hong Kong (In Chinese)* (W. C. Chan, Trans. 1st ed.). Hong Kong: Friends of the Country Parks, Joint Publishing (Hong Kong) Company Limited.
- Dunn, J., and Hurdus, A. R. (2004). *Tourism Rapid Assessment Tool Concept Paper*. Retrieved November 3, 2005, from <http://www.raise.org/tourism/pubs/Tool1.pdf>.
- Dwyer, L., and Kim, C. (2003a). *Destination competitiveness: a model and determinants*. Retrieved August 14, 2006, from <http://www.ttra.com/pub/uploads/007.pdf>
- Dwyer, L., and Kim, C. (2003b). Destination competitiveness: determinants and indicators. *Current Issues in Tourism*, 6(5), 369-414.
- Dyer, P., Gursoy, D., Sharma, B., and Carter, J. (2007). Structural modeling of resident perceptions of tourism and associated development on the Sunshine Coast, Australia. *Tourism Management*, 28(2), 409-422.
- Eagles, P., Bowman, M. E., & Tao, C. H. (2001). *Guidelines for tourism in parks and protected areas of East Asia*. UK & Canada: International Union for Conservation of Nature and Natural Resources (IUCN).

- Eber, S. (Ed.). (1992). *Beyond the Green Horizon: A Discussion Paper on Principles for Sustainable Tourism*. London: WWF and Tourism Concern.
- Eligh, J., Welford, R., and Ytterhus, B. (2002). The production of sustainable tourism: concepts and examples from Norway. *Sustainable Development*, 10, 223-234.
- Fabricius, M. (2006). *Assessing Destination Competitiveness*. Paper presented at the World Tourism Organization Seminar, Manila.
- Farsari, Y., and Prastacos, P. (2000). *Sustainable tourism indicators: pilot estimation for the Municipality of Hersonissos, Crete*. Paper presented at the International Scientific Conference on "Tourism on Islands and Specific Destinations", University of the Aegean, Chios.
- Farsari, Y., and Prastacos, P. (2001). Sustainable tourism indicators for Mediterranean established destinations. *Tourism Today*, 1(1), 103-121.
- Filho, W. L. (1996). Putting principles into practices: sustainable tourism in small island states. In B. A. L. Briguglio, J. Jafari and G. Wall (Ed.), *Sustainable Tourism in Islands and Small States: Issues and Policies* (1 ed., pp. 61-68). London: Pinter.
- Food and Environmental Hygiene Department (FEHD). (2000). *A guide to application for restaurant licences*. Hong Kong: Food and Environmental Hygiene Department (FEHD).
- Forsyth, T. (1997). Environmental responsibility and business regulation: The case of sustainable tourism. *The Geographical Journal*, 163, 270-280.
- Friends of the Earth Hong Kong (FoE). (2005). *Response to the Concept Plan for Lantau Consultation Digest*. Retrieved October 20, 2005, from http://www.foe.org.hk/welcome/geten.asp?id_path=1,%207,%2028,%20152,%202908,%202911
- Fyall, A., and Garrod, B. (1997). Sustainable tourism: Towards a methodology for implementing the concept. In M. J. Stabler (Ed.), *Tourism and sustainability: principles to practice* (pp. 51-68). London: CAB International.
- Garcia-Falcon, J. M., and Medina-Munoz, D. (1999). Sustainable tourism development in islands: a case study of Gran Canaria. *Business Strategy and the Environment*, 8, 336-357.
- Goodall, B., and Stabler, M. J. (1997). Principles influencing the determination of environmental standards for sustainable tourism. In M. J. Stabler (Ed.), *Tourism and Sustainability* (pp. 279-304). London: CAB International.
- Granitsas, A. (1998). Wish you were here. *Far Eastern Economic Review*, 51.

- Green Lantau Association (GLA), The Conservancy Association (CA), Friends fo the Earth (FoE), Green Power (GP), Hong Kong Marine Conservation Society (HKMCS), and World Wide Fund for Nature Hong Kong (WWFHK) (1998). *A Conservation Strategy for Lantau*. Hong Kong: Green Lantau Association.
- Hall, C. M. (1994). *Tourism: In the Pacific Rim Development, Impacts and Markets*. Melbourne: Longman.
- Hardy, A. L., Beeton, R. J. S., and Pearson, L. (2002). Sustainable tourism: an overview of the concept and its position in relation to conceptualization of tourism. *Journal of Sustainable Tourism*, 10(6), 475-496.
- Hassan, S. (2000). Determinants of market competitiveness in an environmentally sustainable tourism industry. *Journal of Travel Research*, 38(3), 239-245.
- Hawkins, D. E. (2004a). A protected areas ecotourism competitive cluster approach to catalyze biodiversity conservation and economic growth in Bulgaria. *Journal of Sustainable Tourism*, 12(3), 219-244.
- Hawkins, D. E. (2004b). Sustainable tourism competitiveness clusters: Application to World Heritage sites network development in Indoneasia. *Asia Pacific Journal of Tourism Research*, 9(3), 293-307.
- Hinch, T. D. (1998). Sustainable urban tourist attractions: the case of Fort Edmonton Park. In C. M. Hall and A. A. Lew (Eds.), *Sustainable Tourism: A Geographical Perspective* (pp. 185-198). UK: Longman.
- Ho, C. O. (2006). *The impact of Hong Kong Disneyland on the Sustainable Development of Hong Kong's tourism industry*. Unpublished Dissertation for the Degree of Master of Arts, The University of Hong Kong, Hong Kong.
- Ho, L. (2005). *Focus on the Sustainable Development of Lantau*. Hong Kong: Lantau Post.
- Hong Kong Disneyland. (2005). Latest News. Retrieved July 20, 2006, from <http://www.hongkongdisneyland.com/eng/discover/2002index.html>
- Hong Kong Environmental Protection Department (HKEPD). (2000). *Environmental Impact Assessment Report for Lantau North-South Road Link Between Tai Ho Wan and Mui Wo*. Retrieved December 15, 2005, from <http://www.epd.gov.hk/eia/register/reason/eia050.htm>
- Hong Kong Environmental Protection Department (HKEPD). (2005) *Beach water quality*. Retrieved November 10, 2005, from http://www.epd.gov.hk/epd/english/environmentinhk/water/beach_quality/bwq_home.html

- Hong Kong Environmental Protection Department (HKEPD). (2006). *20 Years of Beach Water Quality Monitoring in Hong Kong: 2005 visitor numbers*. Hong Kong: Hong Kong Planning Department (HKPD).
- Hong Kong Environmental Protection Department (HKEPD). (2007). *Monitoring of Solid Waste in Hong Kong - Waste Statistics for 2006*. Hong Kong: Hong Kong Environmental Protection Department (HKEPD).
- Hong Kong Special Administrative Region (HKSAR). (1997). *Hong Kong Yearbook 1997*. Retrieved December 3, 2005, from <http://www.info.gov.hk/yearbook/>
- Hong Kong Special Administrative Region (HKSAR). (1999a). *Hong Kong Yearbook 1999*. Retrieved December 3, 2005, from <http://www.info.gov.hk/yearbook/>
- Hong Kong Special Administrative Region (HKSAR). (1999b). *Chief Executive's Policy Address 1999*. Retrieved September 15, 2005, from <http://www.policyaddress.gov.hk/pa99/eindex.htm>
- Hong Kong Special Administrative Region (HKSAR). (2001a). *Chief Executive's Policy Address 2001*. Retrieved September 11, 2005, from <http://www.policyaddress.gov.hk/pa01/eindex.htm>
- Hong Kong Special Administrative Region (HKSAR). (2001b). *Hong Kong Yearbook 2001*. Retrieved December 3, 2005, from <http://www.info.gov.hk/yearbook/>
- Hong Kong Special Administrative Region (HKSAR). (2003). *Hong Kong Yearbook 2003*. Retrieved December 3, 2005, from <http://www.info.gov.hk/yearbook/>
- Hong Kong Special Administrative Region (HKSAR). (2005). *The Budget 2005-2006*. Retrieved September 3, 2006, from <http://www.budget.gov.hk/2005/eng/speech.htm>
- Hong Kong Home Affairs Bureau (HKHAB). (2006). *West Kowloon Cultural District Hong Kong*. Retrieved January 10, 2007, from <http://www.hab.gov.hk/wkcd/>
- Hong Kong Place (HKP). (1999a). *Buildings and Architectures: Historical buildings*. Retrieved December 10, 2005, from <http://www.hk-place.com/view.php?id=239>
- Hong Kong Place (HKP). (1999b). *Buildings and Architectures: Religious buildings*. Retrieved December 10, 2005, from <http://www.hk-place.com/view.php?id=227>
- Hong Kong Place (HKP). (1999c). *Place: Country Parks and Special Areas*. Retrieved December 10, 2005, from <http://www.hk-place.com/view.php?id=140>
- Hong Kong Place (HKP). (1999d). *Place: Mountain of Hong Kong*. Retrieved December 10, 2005, from <http://www.hk-place.com/view.php?id=127>

- Hong Kong Place (HKP). (1999e). *Place: Rivers of Hong Kong*. Retrieved December 10, 2006, from <http://www.hk-place.com/view.php?id=120>
- Hong Kong Planning Department (HKPD). (1998). *Study on Sustainable Development for the 21st Century in Hong Kong (SUSDEV 21)*. Hong Kong: Government of the HKSAR.
- Hong Kong Planning Department (HKPD). (2001a). *Hong Kong 2030: Tourism Planning*. Retrieved December 3, 2005, from http://www.info.gov.hk/hk2030/hk2030content/home_ch/2030_c.htm
- Hong Kong Planning Department (HKPD). (2001b). *South West New Territories Development Strategy Review: Recommended development strategy final report*. Hong Kong: Hong Kong Planning Department (HKPD).
- Hong Kong Planning Department (HKPD). (2001c). *Landscape value mapping of Hong Kong*. Retrieved November 20, 2005, from http://www.pland.gov.hk/p_study/prog_s/landscape/e_index.htm
- Hong Kong Planning Department (HKPD). (2002a). *Study on Revitalization of Tai O*. Hong Kong: Hong Kong Planning Department (HKPD).
- Hong Kong Planning Department (HKPD). (2002b). *The Hong Kong Infrastructure Experience*. Retrieved December 28, 2005, from <http://www.infrastructuregallery.gov.hk/cindex.htm>
- Hong Kong Planning Department (HKPD). (2004). *Concept Plan for Lantau Island*. Retrieved August 3, 2005, from <http://www.pland.gov.hk/lantau/en/background/index.html>
- Hong Kong Planning Department (HKPD). (2005a). *Approved Ngong Ping Outline Zoning Plan. (No. S/I-NP/6): Explanatory statement*. Hong Kong: Hong Kong Planning Department (HKPD).
- Hong Kong Planning Department (HKPD). (2005b). *Hong Kong Planning standards and guidelines: Conservation*. Hong Kong: Hong Kong Planning Department (HKPD).
- Hong Kong Planning Department (HKPD). (2006). *20 Years of Beach Water Quality Monitoring in Hong Kong: 2005 visitor numbers*. Hong Kong: Hong Kong Planning Department (HKPD).
- Hong Kong Tourism Association (HKTA). (2000). *Environmentally sustainable development strategy for Hong Kong's travel and tourism industry (ESDS)*. Hong Kong.

- Hong Kong Tourism Board (HKTb). (2005a). *A statistical review of Hong Kong tourism 2004*. Hong Kong: Hong Kong Tourism Board.
- Hong Kong Tourism Board (HKTb). (2005b). *Hong Kong Tourism*. Retrieved November 16, 2005, from <http://www.hktb.com/eng/index.jsp>
- Hong Kong Tourism Board (HKTb). (2006). *2005 Hong Kong Tourism Statistics*. Hong Kong: Hong Kong Tourism Board (HKTb).
- Hong Kong Tourism Board (HKTb). (2007). *Visitor Arrival Statistics 1996-2006*. Retrieved December 10, 2005, from <http://partnernet.hktb.com/pnweb/jsp/comm/index>
- Hsu, C. H., Huang, H. R., Chen, G. C. T., & Chuang, C. T. (2005). Marine Eco-tourism and Its Socio-economic Assessment for Hsiao-Liu-Chiu Island. *Journal of Fisheries Society of Taiwan*, 32(4), 355-365.
- Huang, H. (2005). *An elder Mickey Mouse (In Chinese)*. China News.
- Hui, E. (2003). *Legislative Council Brief: Tung Chung Cable Car Project and private treaty grant to the franchisee*. Hong Kong: Tourism Commission.
- Inskeep, E. (1991). *Tourism planning: an integrated and sustainable development approach*. New York: Van Nostrand Reinhold.
- International Council on Local Environmental Initiatives (ICLEI). (1999). *Tourism and Sustainable Development - Sustainable tourism: A local authority perspective (Background paper #3)*. New York: Department of Economic and Social Affairs.
- Israel, D. C. (1994). *Review of Macroeconomic Methods and Microeconomic Valuation Methods Applied in the Natural Resources and Environment Sector*. Makati City: Philippine Institute for Development Studies.
- James, D. (2001). Local sustainable tourism indicators. In J. J. Lennon (Ed.), *Tourism statistics: International perspectives and current issues* (pp. 188-198). London, New York: Continuum.
- Jonker, J. A. (2004). *The strategic identification and integration of critical success factors to achieve international competitiveness for South Africa as a tourism destination*. Unpublished Thesis of the Degree of Doctor Commercii, University of Pretoria, South Africa.
- Jordan, D. J., Degraaf, D. G., and Degraaf, K. H. (1999). Evaluation tools, techniques, and data analysis. In D. J. Jordan, D. G. Degraaf and K. H. Degraaf (Eds.), *Programming for Parks, Recreation, and Leisure Services*. PA: Venture Publishing.

- Kaae, B. C. (2001). The perceptions of tourists and residents of sustainable tourism principles and environmental initiatives. In S. F. McCool and R. N. Moisey (Eds.), *Tourism, recreation and sustainability: linking culture and the environment* (pp. 289-313). UK: CABI Publishing.
- Kangas, J., Kurttila, M., Kajanus, M., and Kangas, A. (2003). Evaluating the management strategies of a forestland estate -- the S-O-S approach. *Journal of Environmental Management*, 69, 349-358.
- Kilburn, M. (2001). *Tai Ho - Mui wo Road*. Retrieved August 15, 2006, from <http://www.hkbws.org.hk/conserv2000spring.html>
- Kilipiris, F. (2005). Sustainable tourism development and local community involvement. *Tourism and Hospitality Management*, 11(2), 27-37.
- Kindl, S., and Carlos, J. (2005). *Tourism cluster competitiveness and sustainability: proposal for a systematic model to measure the impact of tourism on local development*. Retrieved March 3, 2006, from <http://www.anpad.org.br/bar>
- Ko, T. G. (2005). Development of a tourism sustainability assessment procedure: a conceptual approach. *Tourism Management*, 26, 431-445.
- Krippendorf, J. (1999). *The holiday makers : understanding the impact of leisure and travel* (V. Andrassy, Trans.). Oxford: Butterworth-Heinemann.
- Kwee, K. T. (2005). *The substitutability between Hong Kong Disneyland and theme parks in the Pearl River Delta*. Unpublished Thesis for the Degree of Master of Sciences, The Hong Kong Polytechnic University, Hong Kong.
- Laimer, P., and Ohlbock, P. (2004). *Indicators measuring the sustainability of tourism: Several considerations and results from the Austrian perspective*. Paper presented at the 7th International Forum on Tourism Statistics, Stockholm, Sweden.
- Lambert, A. (2003). *Economic Valuation of Wetlands: an Important Component of Wetland Management Strategies at the River Basin Scale*. Paper presented at the The Ramsar Convention on Wetlands, Gland.
- Lamoureux, K. M. (2002). *The relationship of tourism development to biodiversity conservation and the sustainable use energy and water resource: a stakeholder framework*. Paper presented at the The World Ecotourism Submit, Quebec.
- Langford, R. L., James, J. W. C., Shaw, R., Campbell, S. D. G., P.A., K., and R.J., S. (2005). *Geology of Lantau District*. Hong Kong: Civil Engineering and Development Department.

- Lau, L. (2003). *Sites of Special Scientific Interest*. Retrieved October 10, 2006, from <http://www.hk-green.com/news/new74.htm>
- Lavigne, J., and Couture, M. (2005). *Towards a Sustainable Tourism: tourism policy of Quebec*. Quebec.
- Lee, K. H. (2004). *Diversity in Tourism – the Case of Heritage and Culture*. Paper presented at the Hong Kong Tourism Symposium 2004 Quality and Diversity, Hong Kong.
- Legislative Council (LC). (2006). *Background Brief on Ngong Ping 360*. Unpublished manuscript, Hong Kong.
- Lemke, J. L. (1998). *Methods of Data Analysis*. Retrieved October 15, 2006, from <http://academic.brooklyn.cuny.edu/education/jlemke/courses/724-interp-analys.htm>
- Li, W. M., and Dewar, K. (2003). Assessing tourism supply in Beihai, China. *Tourism Geographies*, 5(2), 151-167.
- Liu, Z. H. (2003). Sustainable tourism development: a critique. *Journal of Sustainable Tourism*, 11(6), 459-475.
- Lu, L. (2002). *Lantau Island*. Hong Kong: Joint Publishing.
- Malmberg, A. (2003). Lecture Notes, Course in Economic Geography: Lokal miljö, kluster och industriell konkurrenskraft. In S. Nordin, *Tourism Clustering and Innovation: paths to economic growth and development*. Sweden: European Tourism Research Institute.
- Mann, L., Samson, D., & Dow, D. (1998). A field experiment on the effects of benchmarking and goal setting on company sales performance. *Journal of Management Studies*, 24(1), 73-96.
- Mass Transit Railway Corporation (MTRC). (2005). *Construction in Ngong Ping*. Retrieved November 14, 2006, from http://www.mtr.com.hk/eng/extensions/lar2_e.htm
- Mass Transit Railway Corporation (MTRC). (2006). *Tung Chung Cable Car Project*. Retrieved October 15, 2006, from http://www.mtr.com.hk/eng/extensions/env_rep_tc.html
- McCool, S. F. (1999). *Making tourism sustainable, sustainable tourism and what should tourism sustain: different questions, different indicators*. Paper presented at the International Symposium on Coastal and Marine Tourism, Vancouver.

- McCool, S. F., Burgess, C., and Nickerson, N. P. (1998). *Toward a sustainable tourism and recreation industry in Montana: An examination of concepts and industry perceptions*. Missoula, MT: Institute for Tourism and Recreation Research, The University of Montana.
- McDonald, J. (2006). *Understanding Sustainable Tourism development from a complex systems perspective: a case study of the Swan River, Western Australia*. Unpublished Thesis for the Degree of Doctor of Philosophy, Edith Cowan University, Perth.
- McIntyre, G. (1993). *Sustainable Tourism Development: Guide for Local Planners* (1st ed.). Madrid: World Tourism Organization of United Nations (UNWTO).
- McKercher, B. (2003). *Sustainable tourism development - guiding principles for planning and management*. Retrieved August 3, 2005, from <http://www.devstud.org.uk/studygroups/tourism/resources/mckercher.pdf>
- McMinn, S. (1997). The challenge of sustainable tourism. *The Environmentalist*, 17, 135-141.
- Middleton, V. T. C., and Hawkins, R. (2001). A practical research framework for measuring local progress towards more sustainable tourism on Europe-wide basis. In J. J. Lennon (Ed.), *Tourism statistics: International perspectives and current issues* (pp. 175-187). London, New York: Continuum.
- Miller, G. (2001). The development of indicators for sustainable tourism: results of a Delphi survey of tourism researchers. *Tourism Management*, 22, 351-362.
- Moffatt, I. (1996). *Sustainable development: principles, analysis and policies*. New York: Parthenon Publishing.
- Monfort, M., V. M. (2000). *Competitividad y factores criticos de exito en la "hoteleria de litoral": experiencia de los destinos turisticos Benidorm y Peniscola*. Retrieved April 4, 2006, from <http://www.cervantes.com/fichaobra.html?Ret=2619>.
- Mott Connell Ltd. (2005). *Project profile for improvement to the Ngong Ping Stream*. Hong Kong: Mott Connell Ltd.
- Mowforth, M., and Ian Munt. (1998). The principles of sustainability in tourism. In M. Mowforth and Ian Munt (Eds.), *Tourism and sustainability: new tourism in the Third World* (pp. 105-124). London and New York: Routledge.
- Murphy, P. E. (1991). *Tourism: a community approach*. New York: Routledge.

- Nelson, J. G., Butler, R. W., and Wall, G. (1993). *Tourism and sustainable development: Monitoring, planning, managing*. Waterloo: University of Waterloo, Department of Geography.
- Neto, F. (2002). *Sustainable Tourism, Environmental Protection and Natural Resource Management: Paradise on Earth?* Paper presented at the International Colloquium on Regional Governance and Sustainable Development in Tourism-driven Economies Cancun, Quintana Roo, Mexico.
- New World Mobility. (2006). *New World Mobility Country Park Network Coverage*. Retrieved January 15, 2006, from http://www.nwmobility.com/content_img/34180.pdf
- Ng, K. M. (1999). *Planning Sustainable Tourism in Hong Kong*. Unpublished Dissertation for the Degree of Master of Sciences (Urban Planning), The University of Hong Kong, Hong Kong.
- Ng, R. (2004). *Cable car project at Ngong Ping: Environment-friendly or not*. Retrieved August 10, 2006, from http://hkwaterfall.net/hk_falls/ns_cable.htm
- Nordin, S. (2003). *Tourism Clustering and Innovation: paths to economic growth and development*. Sweden: European Tourism Research Institute.
- O'Connor, J. M. (2003). *Community based sustainable tourism*. Paper presented at the 2nd Conference of the International Institute for Peace through Tourism (IIPT), Dar es Salaam, Tanzania.
- Office of the Telecommunications Authority, Hong Kong (OFTA). (2006). *Mobile Network Coverage Survey (Mobile Coverage of Hiking Trails in Country Parks)*. Retrieved August 15, 2006, from http://www.ofta.gov.hk/en/ca_bd/country_map/main.html
- Owen, R. E., Witt, S. F., and Gammon, S. (1993). Sustainable tourism development in Wales: From theory to practice. *Tourism Management*, 14(6), 463-474.
- Pearce, D., Atkinson, G., and Mourato, S. (2006). *Cost-benefit analysis and the environment: recent developments*. Paris: Organization for Economic Co-operation and Development.
- Peng, C. Z. (2003). *Lantau Island : its beautiful countryside*. Hong Kong: Cosmos Books, Friends of the Country Parks.
- Po Lin Monastery (PLM). (2004). *Po Lin Monastery*. Retrieved December 18, 2005, from <http://www.plm.org.hk/blcs/en/index.asp>
- Porter, M. E. (1990). *The Competitive Advantage of Nations*. New York: Basic Books.

- Porter, M. E. (1998). Clusters and the new economics of competition. *Harvard Business Review*, 76(6), 77-90.
- Project Coordinating Unit (PCU). (2003). *MBRS Technical Document No.3: Design and implementation of the MBRS Sustainable Tourism Forum*. Belize: Project Coordinating Unit (PCU).
- Prosser, R. (1994). Societal change and the growth in alternative tourism. In E. Cater and G. Lowman (Eds.), *Ecotourism: A Sustainable Option?* (pp. 19-37). Chichester: John Wiley.
- Pui, C. H., and Kok, K. Y. (2006, September 18). Impacts of the opening of Ngong Ping Cable Car on tourism industry of Lantau Island (In Chinese). *Wen Wei Pao*.
- Qin, S. U., Cao, Y. H., and Lin, B. Y. (2005). Comparative study on residents' perception of tourism impact at tourist places (In Chinese). *Chinese Geographical Science*, 15(1), 70-79.
- Ritchie, J. R. B., and Crouch, G. I. (2000). The competitive destination: A sustainability perspective. *Tourism Management*, 21(1), 1-7.
- Rodrigues, A. B. (2001). *Turismo rural*. Sao Paulo: Contexto.
- Romeril, M. (1998). Tourism and the environment: accord or discord? *Tourism Management*, 10(3), 204-208.
- Secretariat of the Convention on Biological Diversity (SCBD). (2004). *Guidelines on Biodiversity and Tourism development*. Montreal, Quebec: Secretariat of the Convention on Biological Diversity (SCBD).
- Sharpley, R. (2002). Sustainability: A barrier to tourism development? In R. Sharpley and D. J. Telfer (Eds.), *Tourism and development: concepts and issues* (pp. 319-337). Buffalo: Channel View Publications.
- Skyrail-ITM (Hong Kong). (2006). *About Ngong Ping 360: History*. Retrieved October 20, 2006, from <http://www.np360.com.hk/html/eng/about/history.html>
- The World Conservation Union (IUCN), United Nations Environment Programme (UNEP), and World Wildlife Fund (WWF) (1980). *World Conservation Strategy: Living Resource Conservation for Sustainable Development*. Gland Switzerland: IUCN.
- Tosun, C. (2002). Host perceptions of impacts: A comparative tourism study. *Annals of Tourism Research*, 29(1), 231-253.

- Tourism Commission (TC). (1999). *Brief paper - Hong Kong Disneyland*. Hong Kong: Government of HKSAR.
- Tourism Commission (TC). (2001). *Hong Kong Tourism - Expanding the horizon*. Hong Kong: Tourism Commission (TC).
- Tourism Commission (TC). (2004). *Introduction*. Retrieved December 3, 2005, from http://www.tourism.gov.hk/english/about/abt_est.html
- Tourism Commission (TC). (2006). *Major Tourism Projects*. Retrieved June 30, 2006, from http://www.tourism.gov.hk/english/current/current_completed.html
- Tourism Recreation Research and Education Centre (TRREC). (2004). *Tourism Planning Toolkit - Strategic planning toolkit*. Retrieved August 18, 2005 <http://www.tourism.govt.nz/tourism-toolkit/tkt-strategic-planning/index.html>
- Tourism Tasmania Corporate (TTC). (2007). *Sustainable Tourism*. Retrieved January 3, 2007, from <http://www.tourismtasmania.com.au/tasind/sustbly/sustainable.htm>
- Town Planning Board (TPB). (2005). *Approved South Lantau Coast Outline Zoning Plan (No. S/SLC/14)*. Hong Kong: Town Planning Board (TPB).
- Tracy, B. (2005). *Open-ended Questions*. Retrieved June 15, 2006, from <http://www.beststeps.com/Beststep.cfm?bs=343>
- Twining-Ward, L., and Butler, R. (2002). Implementing STD on a small island: development and use of sustainable tourism development indicators in Samoa. *Journal of Sustainable Tourism*, 10(5), 363-387.
- United Nations (UN). (1999). *Guidelines on Integrated Planning for Sustainable Tourism Development*. New York: United Nations.
- United Nations (UN). (2001). *Managing Sustainable Tourism Development (ESCAP Tourism Review No. 22)*. Bangkok: United Nations.
- United Nations (UN). (2004). *Agenda 21*. Retrieved October 15, 2006, from <http://www.un.org/esa/sustdev/documents/agenda21/index.htm>
- United Nations Environment Programme (UNEP). (1997). *Sustainable Tourism: Tourism Carrying Capacity*. Retrieved July 15, 2006, from http://www.biodiversity.ru/coastlearn/tourism-eng/con_capacity.html
- United Nations Environment Programme (UNEP). (2005). *UNEP Principles on the Implementation of Sustainable Tourism*. Retrieved July 18, 2005, from http://www.uneptie.org/pc/tourism/policy/about_principles.htm

- Valentin, E. K. (2001). SWOT analysis from a resource-based view. *Journal of Marketing Theory and Practice*, 9(2), 54-69.
- Vellas, F. (2004). *Indicators for the appropriate development of new tourist infrastructure: the case of SME and sustainable tourism*. Paper presented at the Forum Barcelona 2004.
- Voss, C. A., Ahlström, P., & Blackmon, K. (1997). Benchmarking and operational performance: some empirical results. *Benchmarking for Quality Management & Technology*, 4(4), 273-285.
- Welford, R., Ytterhus, B., and Eligh, J. (1999). Tourism and sustainable development: an analysis of policy and guidelines for managing provision and consumption. *Sustainable Development*, 7(4), 165-177.
- Wen, J. (1998). Evaluation of tourism and tourist resources in China: Existing methods and their limitations. *International Journal of Social Economics*, 25(2/3/4), 467 - 485.
- Wen, M. L., and Keith, D. (2003). Assessing tourism supply in Beihai, China. *Tourism Geographies*, 5(2), 151-167.
- Wheeller, B. (1991). Tourism's troubled times: Responsible tourism is not the answer. *Tourism Management*, 12(2), 91-96.
- Wight, P. (1998). Tools for sustainability analysis in planning and managing tourism and recreation in the destination. In C. M. Hall and A. A. Lew (Eds.), *Sustainable Tourism: A Geographical Perspective* (pp. 75-91). UK: Longman.
- Williams, J., and Lawson, R. (2001). Community issues and resident opinions of tourism. *Annals of Tourism Research*, 28(2), 269-290.
- Williams, M. (2005). *A Sustainable Development Plan for Lantau*. Retrieved December 20, 2005, from <http://www.hkoutdoors.com/lantau-news/lantau-sustainable-development-plan.html>
- Wober, K. W. (2001). *Benchmarking for tourism organizations: An e-guide for tourism managers*: National Laboratory for Tourism and eCommerce.
- Wong, K. C. (2001). *A place for tea in Ngong Ping, Lantau Island*. Unpublished Thesis for the Degree of Master of Architecture, The University of Hong Kong, Hong Kong.
- Wong, W. K. (2006, February 13). Po Lin Monastery claims to impose entrance fee (In Chinese). *Oriental Daily*.

- World Commission on Environment and Development (WCED), (1987). *Brundtland Report: Our Common Future*. US: Oxford University Press.
- World Tourism Organization of United Nations (UNWTO) (2004). *Sustainable Development of Tourism*. Retrieved August 3, 2005, from <http://www.world-tourism.org/sustainable/concepts.htm>
- World Wide Fund (WWF) for Nature Hong Kong. (2000). *Tai Ho*. Retrieved October 10, 2006, from http://www.wwf.org.hk/eng/conservation/hab_protect/green_dragon/tai_ho.php
- World Wide Fund (WWF) for Nature Hong Kong. (2007). *Tai Ho*. Retrieved October 10, 2006, from http://www.wwf.org.hk/eng/conservation/hab_protect/green_dragon/tai_ho.php
- Wu, B. L. (1963). *Jin ri Dayushan (In Chinese)*. Hong Kong: Hua qiao ri bao.
- Wu, C., Li, S., and Deng, J. (1992). Landscape Evaluation of ZhangJiaJie National Forest Park. In C. Wu and Z. Wu (Eds.), *Studies on ZhangJiaJie National Forest Park* (pp. 1-12). Beijing: Chinese Forestry Press.
- Yang, G. (1994). *Tourism Resources*. Kunming: Yunnan University Press.
- Yeung, K. M. (2006). Ngong Ping 360. In W. C. Chan and T. K. Woo (Eds.), *Sky Walk: An aerial geography of Hong Kong* (1st ed.). Hong Kong: Friends of the Country Parks, Cosmos Books Ltd.
- Yuen, H. Y. (1999). *The potential for tourism in the non-urban areas of Hong Kong*. Unpublished Dissertation for the degree of Master of Sciences (Urban Planning), The University of Hong Kong, Hong Kong.

APPENDIX 1
Sustainable tourism indicators suggested by Vellas (2004)

Environmental indicators				
<i>Biodiversity and ecosystem vulnerability</i>	<i>Waste treatment</i>	<i>Land occupation</i>	<i>Water consumption</i>	<i>Air pollution</i>
1) Fauna			1) Quantitative	1) Atmospheric
No. of species	Ratio of treated wastewater to total wastewater	Ratio of tourists to residents	Vol. of water used by tourists as a share of that used by host population	Air pollution
Populations of species found	Onsite waste level	Ratio of tourism infrastructure footprint to total surface area	Vol. of water used as a share of total available fresh water	Exhaust gases (No. of days pollution levels exceed prescribed levels)
Size of habitat of said species	Level of treatment actually performed			
Decrease in habitat size			2) Qualitative	2) Other
			Potability index for tourism facilities	Noise pollution
2) Flora			Pollutants index	Site utilization (Tourist/ host populations ratio)
No. of species				
Populations of species found			3) Price	
Share of primitive flora in total plant cover			Cost of supplying water per tourist	
Size of habitat of said species			Cost of supply drinking water per tourist	
Decrease in habitat size				

Socio-economic indicators				
Tourism pressure	Social impact	Local satisfaction	Crime	Public health
1) Crowding	1) Impact	1) Before- and-after survey with questionnaires	1) Local population	1) General
No. of tourists VS locals visiting a site per day	No. of new jobs		Ratio of reported thefts to local population	Mortality rate
Per month	No. of new skilled jobs	2) Ratios	Ratio of reported assault & battery to local population	Physicians/ nurses per capita
Per holiday season	No. of new women's jobs	Ratios of hotel infrastructure usage by host population	Ratio of reported crime to local population (ratio of juvenile delinquency to local population)	
Per year	No. of new skilled women's jobs	Ratios of restaurant infrastructure usage by host population		2) Specific
	Boy school attendance rate	Ratios of tourism-project sports facility/ cultural infrastructure usage by host population	2) Tourists	Local STD rate
2) Site crowding	Girls school attendance rate		Ratio of reported thefts to tourist population	Food poisoning rate
No. of tourists per square meter of beach			Ratio of reported assault & battery to tourist population	Other disease rate
Of nature sites	2) Ratio		Ratio of reported crime to tourist population (ratio of juvenile delinquency to tourist population)	
Of cultural sites	Female/male average wages			
	Female/male average skilled wages			
	Female employee training & education due to project VS average local level			
	Male employee training & education due to project VS average local level			

Tourism sustainable indicators	
1) Sustainability indicators	2) Ratios
Physical impact	Tourism/ total surface areas
Liquid waste treatment	Treated/total liquid waste
Solid waste treatment	Treated/ total solid waste
Water consumption	Water consumption/ room
Eyesore	Average/ total building height
New jobs	New jobs/ room/ place
Job training	Share of staff on job training
Local patronization	Local patronization (in sales)
Crime	Crime/ tourist
Public health	Distance to nearest physician
Local production impact	Local/ total spending
Controlled development	Participation in environmental action campaigns
Cultural tourism	Share of cultural spending
New technologies	Internet access
Child welfare awareness	Child welfare information
Job security	Job security

APPENDIX 2 Major recorded development on Lantau Island (1906-2007)

Time (D/M/Y)		Events
1900s	1906	Opening of Po Lin Monastery in Ngong Ping*
1930s	Early 1930s	Yau Ma Tei Ferry (between Lantau Island and Hong Kong Island) began operation
1940s	1948	Opening of Tea Garden in Ngong Ping*
1950s	1950	Construction of Mui Wo Pier
	11 October, 1953	Establishment of Mui Wo Rural Committee
	15 December, 1955	Establishment of Tai O Rural Committee
	3 August, 1957	1st Lantau Road began operation
	27 January, 1958	Establishment of South Lantau Rural Committee
	1 April, 1959	2nd Lantau Road began operation
	Late 1950s	Construction of Tai O Pier
1960s	April, 1960	1st bus route between Mui Wo and Shek Pik began operation by KMB
	1963	Shek Pik Reservoir began operation
1970s	1973	New Lantau Bus began operation
	23 June, 1976	Designation of Tai Tung (Sunset) Peak as SSSI
	1977	Development of Discovery Bay
	1978	Set up of North Lantau Country Park and South Lantau Country Park
	19 December, 1979	Designation of Sunset Peak and Lantau Peak as Special Areas
1980s	5 February, 1980	Designation of Fung Wong Shan (Lantau Peak) and Man Cheng Po as SSSI
	1984	Establishment of Shek Pik Prison
	4 December, 1984	Opening of Lantau Trail*
	1989	Introduction of Port and Airport Development Strategy
1990s	29 December, 1993	Opening of The Big Buddha
	1994	Designation of Po To Yan, Por Kai Shan and San Tau Coast as SSSI
	November, 1995	Opening of Ngong Ping new public toilet (with the highest construction cost in Hong Kong)*
	January, 1997	Completion of Tung Chung New Town (Phase 1)
	22 May, 1997	Operation of North Lantau Expressway and Lantau Link
	February, 1998	Introduction of SWNT Development Strategy Review
	21 June, 1998	Tung Chung Line (MTR railway) began operation
	6 July, 1998	Opening of Chek Lap Kok Airport and the operation of Airport Express
	1999	Opening of Lantau Link Visitor Center and View Point
2000s	1999	Designation of San Chau, Ngong Ping and Tai Ho Stream as SSSI*
	2000	Establishment of Ngong Ping Fun Walk*
	February, 2001	Completion of Tung Chung New Town (Phase 2)
	April, 2003	Completion of Tung Chung New Town (Phase 3A)
	February, 2004	Set up of Lantau Development Task Force for the Lantau Concept Plan
	May, 2005	Opening of Wisdom Path in Ngong Ping*
	16 August, 2005	Opening of Inspiration Lake Recreation Centre
	12 September, 2005	Opening of Hong Kong Disneyland
	21 December, 2005	Opening of Asia World Expo
	Late 2005	Opening of Ngong Ping Sewage Treatment Information Centre*
	18 September, 2006	Opening of Ngong Ping 360*
	February, 2007	Opening of Sky Plaza

Note: * Development in Ngong Ping; Data Source: Wu, 1963; Lu, 2002

NATURAL RESOURCES

NATURAL RESOURCES																	
Landscape			Major Water / Rivers			Selected Flora					Selected Fauna						
Name	Height (m)		Name	Descriptions	Medicinal Herbs	Orchids	Poisonous plants	Rare plants	Fungus	Fruit crops	Vegetable crops	Birds	Butterflies	Dragonflies	Mammals	Amphibians and Reptiles	Others
Lantau Peak (Fung Wong Shan)	934		Tai Ho Stream	It is one of the most ecologically valuable fresh water streams in Hong Kong with over 40 fish species recorded. A rich diversity of fauna including rare fish species like Ayu and Berneti (a Class II protected species in China), and the linkages to other ecologically important inter-tidal habitats in Tai Ho Bay.	Asarum hongkongensis (Hong Kong Asarum)	Paphiopedilum purpuratum (Hong Kong Lady Slipper Orchid)	Strophanthus divaricatus (Goat Horns)	Rhododendron championi (Champion Rhododendron)	Chlorophyllum molybdites (Green-spored Lepota)	Banana	Ginger	Little Egret	Indian Cabbage White	Elegant Cucktail	Chinese White Dolphin	Romer's Tree Frog	Sucker-belly Loach
Sunset Peak (Tai Tung Shan)	869		Tung Chung River	It runs from the mountain stream area around Nei Lak Shan and Tai Tong Tsai to Tung Chung Bay. It is also rich in freshwater fish species with about 23 recorded. It is only known site in HK for Acrossocheilus (Lissolichthys) wenchowensis beijiangensis.	Mahonia owakensis (Island Mahonia)	Mischobulbum cordifolium (Heart-leaved Mischobulbum)	Gelsemium elegans (Graceful Jesamine)	Amentotaxus argotaenia (Amentotaxus)	Tremella fuciformis Berk (Jelly Fungus)	Pineapple	Carrot	Daurian Redstart	Lime Butterfly	Hong Kong Flatwing	Indian Muntjac	Asian Common Toad	Tutcher's Maple
Lin Fa Shan	766		Wo Lung Hang	The upper course of Wo Lung Hang is the streams around the area of Yi Tung Shan and Lin Fa Shan. It runs along Wong Lung Hang and Tung Chung Town to Tung Chung Bay.	Nepenthes mirabilis (Pitcher plant)	Pholidota chinensis (Chinese Pholidota)	Strychnos angustiflora (Narrow flower poisonnut)	Eubucklandia tonkinensis	Russula amara Quel	Papaya	Sweet potatoes	Pied Kingfisher	Plain Tiger	Pantala flavescens	Bent Winged Bat	Brown Tree Frog	Chinese Bulbul
Nei Lak Shan	751		Tai O Chung	It runs from the area around Cheung Shan, Keung Shan and Luk Wu to the sea through Yim Tin and Tai O.	Paris polyphylla Sm. var. chinensis (Love apple)	Eulophia flava (Yellow-flowered Eulophia)	Dature arborea	Milium angustisepalum (Lantau Star-anise)	Amanita virginioidea Bas (Sharp-scaled White Amanita)	Melon	Luffa	Black Drongo	Common Mime	Orthetrum sabina sabina	Intermediate Horseshoe	Paddy Frog	Acrossocheilus beijiangensis
Yi Tung Shan	747		Silver River	Silver River runs from the area around Lin Fa Shan to the Silvermine Bay.				Gmelina chinensis	Lanoplia nipponica (Nipponian Puffball)	Loquats	Mustard	Common Kingfisher	Yellow Orange Tip	Anax immaculifrons		Changeable Lizard	Rice fish
Kau Nga Ling	548		Keung Shan Stream	It is recently famous for having the first record worldwide for a new dragonfly species and solely found from Lantau – Sinosticta ogatai.				Tetrathyrium subcordatum (Hong Kong Witch-hazel)	Auricularia polytricha (Hairy Jew-Earl)	Pomeio	Turnip	White-breasted Waterhen	Common Bluebottle	Rhinocypha perforata perforata		Red-necked Keeback	
Po To Yan	529		Ngong Ping Stream	It supports the largest known breeding population of Romer's Tree Frog Philautus romeri in Hong Kong.				Chinese Lily	Scleroderma flavidum El. and Fr. (Glabrous Stone Puffball)	Longan	Taro	Crested Myna	Common Birdwing	Rhipidolestes janetae		Short-legged Toad	
Sze Tse Tau Shan	494		Sunset Peak Stream	It is the site of only two Hong Kong records for the Brown Dipper Cinclus pallasi.				Brainea insignis	Ganoderma applanatum (Pres.) Pat. (Artist's fungus)	Jackfruit	Cabbage	Chinese Bulbul	Blue Admiral	Coelocia cyanomelas			
Ling Wui Shan	490		Wong Lung River					Malaxis latifolia Smith	Sterum vibrans B. et C.	Lychee	Bak choy	Barn Swallow	Common Mapwing	Orthetrum glaucum			
Por Kai Shan	482		Man Cheng Po						Panaeolus retinngis (Fr.) Gill	Dragonfruit		White-brested Kingfisher	Constable	Orthetrum luzonicum			
Muk Yue Shan	479									Wampi		Fork-tailed Sunbird	Common Sailer	Orthetrum pruinosum neglectum			
												Kestrel	Bush Hopper	Copera marginipes			
Tai Hom Sham	466											Rufous-backed Shrike	Cornelian	Euphaea decorata			
Lo Fu Tau	465											Black Kite	Peacock Pansy	Anax quitalatus			
Keung Shan	459											Black-headed gull		Tritemis aurora			
Cheung Shan	449													Neurothemis tullia tullia			
Cheung Yan Shan	443																
Kwun Yam Shan	434																
Sham Hang Lek	430																
Middle Kau Nga Ling	428																
Lau Fa Tung	378																
Nga Ying Shan	374																
Shek Sze Shan	340																
Tsim Fung Shan	339																
Wo Liu Tan	324																
Sze Shan	322																
Tai Che Tung	302																

Data Sources: BG, 2005; Dudgeon and Corlett, 2004; GLA et al., 1998; HKEPD, 2000; HKP, 1999d; HKP, 1999e; Peng, 2003

APPENDIX 4 Cultural resources on Lantau Island

CULTURAL RESOURCES										
Major communities					Architectures		Religion		Historical/ Declared Monuments	
Mui Wo	Discovery Bay	Tung Chung	Tai O	South Lantau	Other Parts	Name	Descriptions	Name	Descriptions	Name
Wang Tong	Siena	Ma Wan Chung	Lung Tin Estate	Lower Cheung Sha Village	Ngong Ping	Tin Hau Temple in Tung Chung	Tin Hau Temple in Tung Chung is the only temple in Hong Kong constructed by granite. It was constructed in 1823 and originally located at Mui Wan which is the northern part of Chek Kok. Because of the construction of the new airport, the temple was moved and rebuilt in Wong Lung Hang Village in Tung Chung.	Tin Hau Temple in Fan Lau	Tin Hau is the goddess of Sea. Her home town was Fujian and her name was Lam Mak Leung when she was alive. As Hong Kong was a fishing harbour, there are a total of 50 Tin Hau Temple, which is the commoniest temple in Hong Kong.	Rock Carving in Shek Pik
Wo Tin	Nim Shue Wan Village		Wang Hang Village	Upper Cheung Sha Village	Tai Ho San Tsuen	Hau Wong Temple in Tung Chung	Hau Wong Temple in Tung Chung is located at Sha Tsui Tau in Tung Chung. It was constructed in 1765. There is an old clock in the temple that verifies the 250-year history of the temple.	Tin Hau Temple in Pui O		Tung Chung Fort
Yick Yuen	Greenvale Village	Caribbean Coast	San Tsuen	Tong Fok Village	Ngau Kwu Long, Tai Ho	Ba Kong Temple in Sha Lo Wan	Ba Kong Temple in Sha Lo Wan was constructed in 1774. It was a temple to worship Hung Shing who was the King of the harbour.	Tin Hau Temple in Tai Long Wan		Fan Lau Fort
Pak Ngan Heung	Headland Village	Seaview Crescent	Leung Uk Tsuen	Butterfly Crest, Cheung Sha	Tin Liu, Tai Ho	Man Mo Temple in Mui Wo	Man Mo Temple in Mui Wo is one of the oldest temples on the Lantau Island. It was constructed in the Ming dynasty with a history of more than 400 years. It has been rehabilitated in 1901 and 1960.	Tin Hau Temple in Sha Lo Wan		Stone Circle in Fan Lau
Nim Po Tsuen	Beach Village	Tung Chung Crescent	Lung Hin Court	Miami Garden, Cheung Sha	Yi O San Tsuen	Yeung Ha Temple in Tai O	Yeung Ha Temple in Tai O is located beside Po Chu Tam. The history of the temple is probably about 300 years, as an old clock, which was made in 1699, was found in the temple.	Tin Hau Temple in Tai O		Tung Chung Battery
Sun Lung Wai	Parkvale Village	Fu Tung Estate	Shek Tsai Po	Pui O Lo Wai Tsuen		Temple of King Kwan in Tai O	The Temple of King Kwan in Tai O is the oldest building in Tai O and located at Kut Hing back street. It was constructed in 1488 with a history of more than 400 years. It is used to worship King Kwan, with small temples beside to worship Tin Hau.	Tin Hau Temple in Chek Lap Kok Village		
Tai Tai Tong	La Costa	Yu Tung Court	Nam Chung Tsuen	Pui O San Wai Tsuen	Luk Wu	Tin Hau Temple in Tai O Village	Tin Hau Temple in Tai O Village was constructed around the area of Nam Chung. An old clock of 1713 was found in the temple.	Hung Shing Temple in Fan Lau	Hung Shing is the goodness of sea. Hung Shing is the same as Hung Hei, who was a government official in Tang dynasty. He was very intelligent and kind to help fishermen. Therefore, he was respected in the temple after he died.	
Tseung Tau San Tsuen	Coastline Villa	Wong Nai Uk	Fan Kwai Tong	Lo Uk Tsuen, Pui O		Shek Tsai Po Hung Shing Temple in Tai O	Shek Tsai Po Hung Shing Temple in Tai O was constructed in 1736 and located in front of Tai O Public School.	Hung Shing Temple in Mui Wo		
Tsoi Yuen Tsuen	Bijou Hamlet	Yai Tung Estate		Ham Tin, Pui O		Shek Tsai Po Old Police Station in Tai O	Shek Tsai Po Old Police Station in Tai O was constructed in 1902, and located at the slope of the Shek Tsai Po Pier. It is a western style double-deck building.	Hung Shing Temple in Tai O		

Appendix 4 Cultural resources on Lantau Island

Mui Wo Kau Tsuen	Ma Wan New Village	Shap Long Chung Hau, Chi Ma Wan	Tin Hau Temple in Fan Lau	Tin Hau Temple in Fan Lau A rehabilitation site of 1920 and 1928 was found in the temple. It is thus believed that the temple has a history of about 200 years.	Ba Kong Temple in Sha Lo Wan	Due to the windy coastal feature of Sha Lo Wan, Ba Kong Temple was specially constructed by Sha Lo Wan residents for the King of San On Mau Chau.	
Ma Po Tsuen	Fui Yiu Ha	Shap Long San Tsuen, Chi Ma Wan			Hau Wong Temple in Tung Chung	Hau Wong is Yeung Luen Chi who rescued the king of Song dynasty. He was loyal to the king and the dynasty and thus being honored as Yeung Hau King after he died.	
Ha Tsuen Long Luk Tei Tong	Sheung Ling Pei	Shap Long Kau Tsuen, Chi Ma Wan			Yeung Hau Temple in Tai O		
Chung Hau	Ha Ling Pei	Shui Hau Village			Kun Yam Temple in Kung Shan	Kun Yam is one of the Gods in Buddhism. She is a female God and used to sit on the Lotus for meditation.	
Ling Tsui Tau	Wong Ka Wai	Sea Ranch			Temple of King Kwan in Tai O	King Kwan was one of the major generals in the San Kou period. There was the legend that Kwan kept protecting the villagers after he died.	
Ngan Wan Estate	Lung Tseng Tau	Butterfly Crest, Cheung Sha			Man Mo Temple in Mui Wo	Man Mo Temple includes the King Man and King Mo.	
Silver Waves Court	Chek Lap Kok New Village	Swiss Garden, Cheung Sha			Temple of Three Kings in Tung Chung	Some government officials prayed in San Shan during a war and they won the war eventually. They thought that it was helped by the Three Kings.	
Lung Mei Tsuen	Tei Po New Village	Bahama Garden, Cheung Sha			Pak Tai Temple in Mui Wo	Pak Tai was a prince and won a battle. He was then honored as Yuen Tin God.	
Round Table Village		Cheung Sha Villa, Cheung Sha					
Wan Tsai		Miami Garden, Cheung Sha					
Lai Chi Yuen Tsuen		Leyburn Villa, Cheung Sha					
Methodist Villa		Beach View, Cheung Sha					
Scenic Crest							
Sea Crest Terrace							
Sea View Building							
Gallop Court							
Lucky Court							
Harbour View Villa							
Silver Pearl							
Manson							
Grandview							
Manson							
Silver Centre House							

Data Sources: HKP, 1999a; HKP, 1999b; AMO, 2004

APPENDIX 5 Routes of trails on Lantau Island

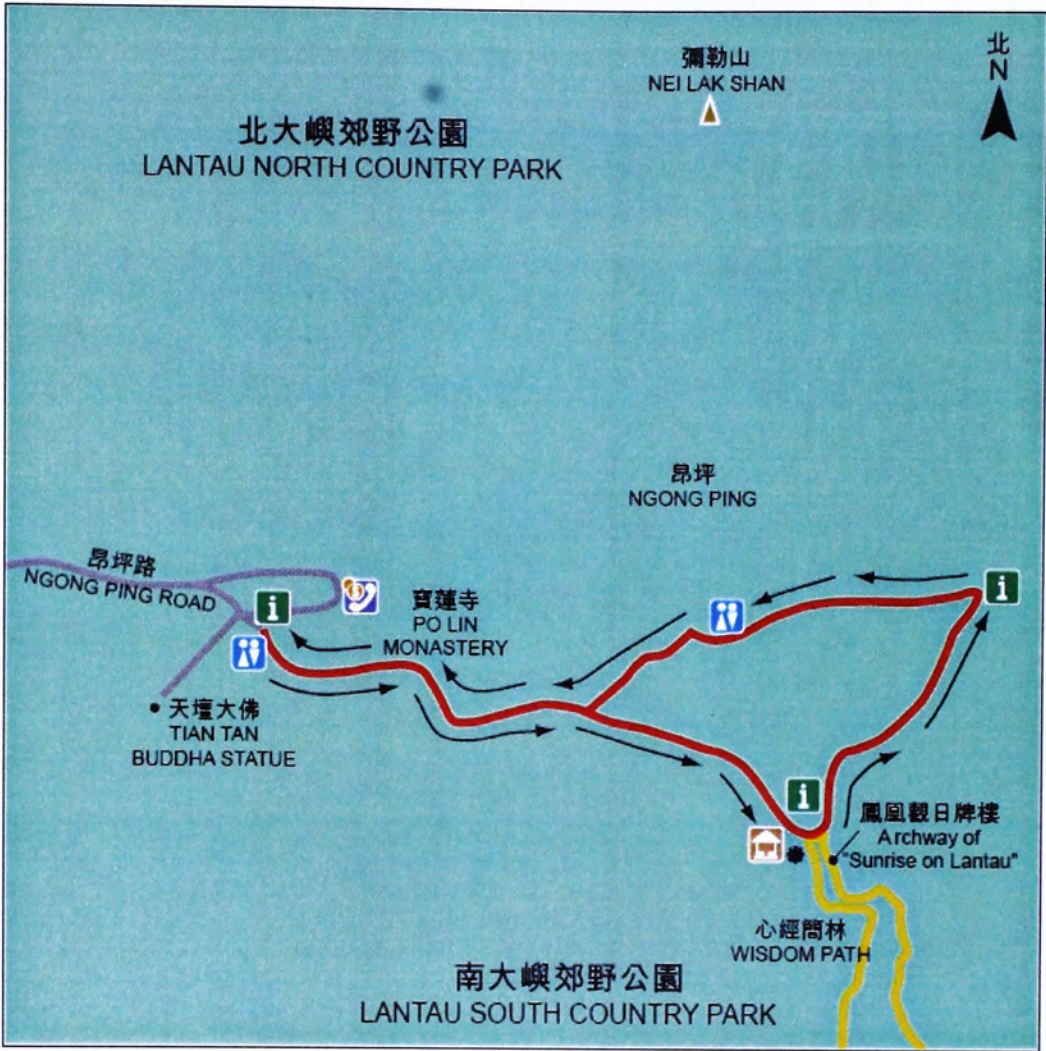


Figure A5.1 The route of Ngong Ping Fun Walk
Source: AFCD, 2005b



Figure A5.2 The route of Lantau Trail
Source: AFCD, 2006b



Figure A5.3 The route of Chi Ma Wan Country Trail
Source: AFCD, 2005b



Figure A5.4 The route of Fan Lau Country Trail
Source: AFCE, 2005b



Figure A5.5 The route of Keung Shan Country Trail
Source: AFCD, 2005b



Figure A5.6 The route of Shek Pik Country Trail
Source: AFCD, 2005b



Figure A5.7 The route of South Lantau Country Trail
Source: AFCD, 2005b



Figure A5.8 The route of Tei Tong Tsai Country Trail
Source: AFCD, 2005b

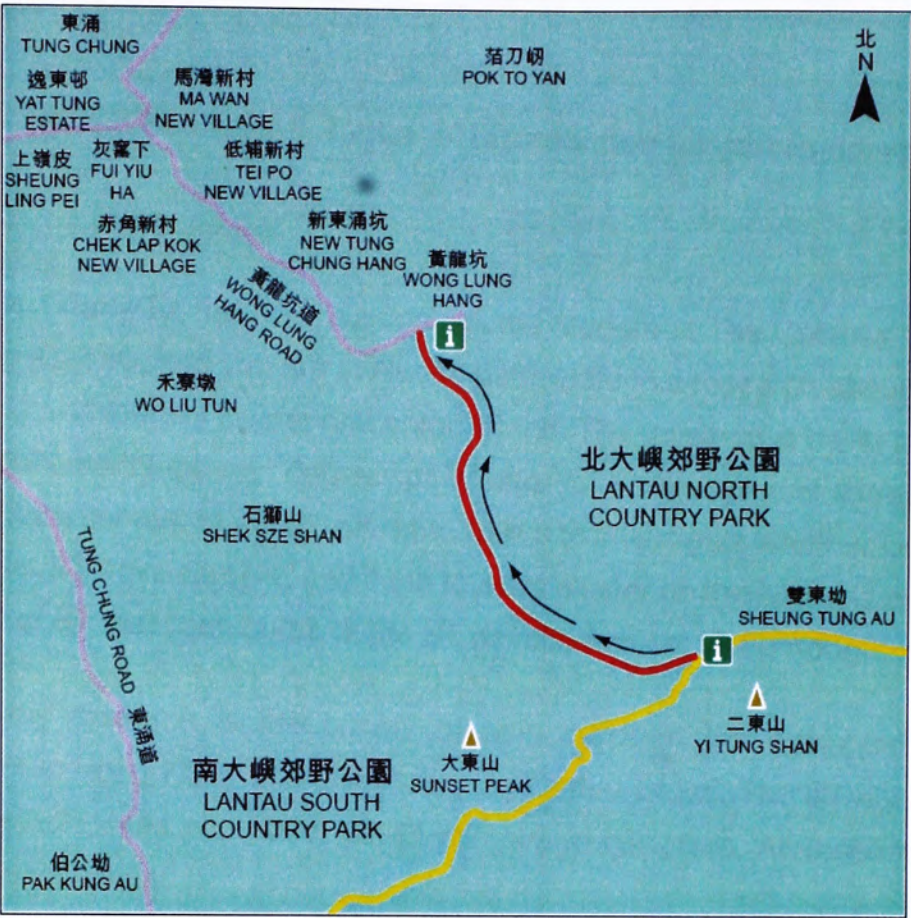


Figure A5.9 The route of Wong Lung Hang Country Trail
Source: AFCD, 2005b



Figure A5.10 The route of Nam Shan Tree Walk
Source: AFCD, 2005b

APPENDIX 6 Letter of Introduction for stakeholders

Dear _____

My name is Tiffany To, Tin Wei, a postgraduate student at The Chinese University of Hong Kong (CUHK), and you are invited to participate in a research about sustainable tourism (ST) and tourism cluster on Lantau Island. The research is being taken as part of the requirements of my degree of Master of Philosophy in Geography and Resource Management at the CUHK. I would like to investigate whether Lantau Island is suitable for ST development, and if the tourism cluster on the island is performing in the context of ST that contributes to the ST development in Hong Kong.

Critical to my research is the survey of opinions from the stakeholders on ST development in Hong Kong and specifically on Lantau Island. The survey consists of two parts, which takes you about 30-45 minutes to complete. All responses will be completely confidential.

This research can perform as reference for the government in formulating strategies for the future development of ST in Hong Kong. As a stakeholder, your responses and information provided are therefore invaluable and contributing to the greater understanding of ST development in Hong Kong and on Lantau Island.

Your participation and cooperation in this research is highly appreciated. Attached please find the questionnaire for your reference. If you have any questions or requires concerning the research and interview, you are always welcome to contact me at the following address. I look forward to hearing from your reply. Thank you very much for your attention and kindly help.

Yours sincerely

Tiffany To Tin Wei (Researcher)

Department of Geography and Resource Management
The Chinese University of Hong Kong
Shatin, N.T.,
Hong Kong

Email: twtoo@cuhk.edu.hk

Phone: 26096541

APPENDIX 7 Questionnaire for stakeholders

Questionnaire for stakeholders of Sustainable Tourism development in Hong Kong

Background information for the research

Research Topic

Developing Sustainable Tourism in Hong Kong: A case study of tourism cluster on Lantau Island

Research Objectives

- 1) To review current policies, planning and development of tourism in Hong Kong, especially on Lantau Island
- 2) To investigate and assess potentials and limitations for the development of ST on Lantau Island
- 3) To evaluate the performance of the tourism cluster in Ngong Ping in the context of ST
- 4) To recommend and formulate strategies for ST development

Research Definitions

Sustainable Tourism (ST):

The definition of ST for this research is made with reference to the definition suggested by the World Tourism Organization of United Nations (UNWTO, 2004).

Sustainable tourism development meets the needs of present tourists and host regions while protecting and enhancing opportunities for the future. It is envisaged as leading to management of all resources in such a way that economic, social and aesthetic needs can be fulfilled while maintaining cultural integrity, essential ecological processes, biological diversity and life support system. Sustainable tourism development guidelines and management practices are applicable to all forms of tourism in all types of destinations; including mass tourism and the various niche tourism segments (UNWTO, 2004).

Tourism Cluster:

From a geographical perspective, the focus of tourism cluster in this research was considered as “the clustering of tourism resources or attractions within a limited geographic area”.

PART 1: SWOT of Lantau Island for ST development

The Hong Kong government has planned to develop Lantau Island as a region for nature conservation, economic development, and sustainable tourism (ST). Some of the Strength (S), Weakness (W), Opportunity (O) and Threat (T) of the Lantau Island for development of ST are listed as follows.

To what extent do you agree the following descriptions are the SWOT of Lantau for the development of ST? Please tick the correspondence boxes.

STRENGTHS	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. Resources and Attractions	1	2	3	4	5
a) Abundant natural resources					
b) Outstanding scenery with various high value natural landscapes					
c) Variety of fauna and flora species/ biodiversity					
d) Beautiful beaches and shorelines					
e) Most part of the southern island remain undeveloped					
f) Presence of Site of Special Scientific Interest (SSSI) (e.g. Sunset Peak, Lantau Peak, Tai Ho Stream, etc.)					
g) Large green area provides relatively good air quality					
h) With both traditional (e.g. Tai O) and modern (e.g. Tung Chung New Town) cultures of HK					
i) Presence of purpose-built attractions (e.g. Theme Park)					
Others:_____					
2. Capital (Infrastructures, Facilities, Accessibility, etc.)					
a) Improved accessibility from urban areas to NE Lantau					
b) The Ngong Ping 360 Project with Cable Car					
Others:_____					
3. Policies and planning					
a) Conservation and educational purposes of the natural landscape and Country Parks					
b) Concentration of tourist attractions on the island					
c) Promotions of Lantau Island in the International markets by HKTB					
d) Consultations with the stakeholders about the development projects on Lantau Island					
e) Individual Visit Scheme may increase tourists to Lantau Island					
Others:_____					

WEAKNESSES	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. Resources and Attractions	1	2	3	4	5
a) Reclamations in Northern Lantau have disturbed the marine habitats					
b) Size limitation of the HK Disneyland					
c) Lack of special festivals on Lantau Island					
Others: _____					
2. Capital (Infrastructures, Facilities, Accessibility, etc.)					
a) Relatively far away from the urban areas/ CBD of HK					
b) Relatively high transportation cost for local tourists					
c) Limited kinds of transport traveling around the whole island					
d) Far away from the emergency services (e.g. Hospitals)					
e) Insufficient mobile phone network coverage in the Country parks and Southern Lantau					
f) Tourist services are mostly focused on some attractions only					
g) Lack of information centers					
Others: _____					
3. Policies and planning					
a) Lack of comprehensive framework and principles for ST development on Lantau Island					
b) Lack of ST guidelines, indicators and policies to help the industry					
Others: _____					

OPPORTUNITIES	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. Resources and Attractions	1	2	3	4	5
a) Excellent possibilities for ecotourism in Southern Lantau					
b) Nature trails, long distance hiking trails and country trails for ecotourism					
c) Potential areas for the extension of Country Park					
d) Religious buildings and historical monuments provide more cultural attractions					
e) Diversity of attractions on Lantau Island for various kinds of visitors					
Others: _____					
2. Capital (Infrastructures, Facilities, Accessibility, etc.)					
a) Construction of visitor centers can provide more visitor information and orientation					
b) Presence of Asia World Expo and Sky City					
Others: _____					
3. Policies and planning					
a) Increasing investments on Lantau for tourism developments					
b) Development of Sunny Bay as a tourism node					
c) Preservation of Tai O culture					
d) A Vision for the Silvermine Bay Waterfront suggested by the local community on Lantau Island					
e) New Nature Conservation Policy for Hong Kong (e.g. Tai Ho)					
Other: _____					

THREATS	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. Resources and Attractions	1	2	3	4	5
a) Further development on Lantau Island will cause strain on ecosystem					
Others:_____					
2. Capital (Infrastructures, Facilities, Accessibility, etc.)					
a) Insufficient waste treatment and recycling facilities on Lantau Island					
Others:_____					
3. Policies and planning					
a) Lack of realistic and long-term ST development planning for Lantau Island					
b) Lack of regulations for the implementation of ST practices on Lantau Island					
Others:_____					

PART 2: Tourism development and tourism cluster on Lantau Island

Review of tourism policies and development

- 1) What do you think “Sustainable tourism” is?
- 2) What do you think about the existing tourism policies and development of Hong Kong and Lantau Island?
- 3) Should there be any criteria required to promote and develop ST in Hong Kong? What are the criteria?

Tourism cluster and ST practices

- 4) Do you support the concentration of tourist attractions (tourism cluster) on Lantau Island or in Ngong Ping?
- 5) Do you think that the formation of tourism cluster on Lantau Island or in Ngong Ping can contribute to the development of ST in Hong Kong? Why and how? / Why not?
- 6) Do you think that the developers have done something positively to the environment of Lantau Island or Ngong Ping? What have they done and how does it benefit to the environment of Lantau Island or Ngong Ping?
- 7) Do you think that the attractions or tourism cluster on Lantau Island has contributed to the conservation of the local cultural heritages and traditional values? What has they contributed?
- 8) Do you think that the attractions or tourism cluster on Lantau Island can provide a long term economic benefits for Hong Kong? Why?
- 9) Can you provide some suggestions for the developers to make improvements?

~THE END~

Thank you for your participation!

APPENDIX 8 Details of SWOT

The potential and weaknesses of Lantau Island for ST development was investigated by SWOT analysis. A total of 44 S, W, O, T of Lantau Island for ST development were selected and listed by the researcher according to the resource inventory of Lantau Island. The 44 items were classified in SWOT based on (1) Resources and attractions, (2) Capital and (3) Policies. To have a clear understanding of SWOT described by the researcher, the detail explanations of each item are listed below. Most of the descriptions are made with reference to secondary data or information collected from interviews and surveys.

STRENGTHS
1. <u>Resources and Attractions</u>
a. Abundant natural resources (Appendix 4) <ul style="list-style-type: none">- Natural resources include mountains, rivers and streams, flora and fauna.
b. Outstanding scenery with various high value natural landscapes <ul style="list-style-type: none">- According to the landscape value mapping of HK: most part of the landscapes of Lantau Island are graded as high value landscapes (HKPD, 2001c) (Figure A8.1)- The Lantau South Country Park was designated in 1978 with a total area of 56.4km². The Lantau North Country Park was also designated in 1978 and occupies a total area of 22 km². They consist of 2 special areas with high ecological value (AFCD, 2005).- Tai Tung Shan and Lantau Peak are 2 of the 17 special areas designated in 1979 in Hong Kong (HKP, 1999c).
c. Variety of fauna and flora species/ biodiversity (Appendix 4)
d. Beautiful beaches and shorelines <ul style="list-style-type: none">- There are 5 gazette beaches on the island: Silvermine Bay beach, Pui O beach, Cheung Sha (Upper) beach, Cheung Sha (Lower) beach and Tong Fuk beach.- The water quality of those beaches were classified by the EPD in 2004 as “Good” (HKEPD, 2005)- Some small beaches can also be found in the western part of Lo Kei Wan (Crescent Island).
e. Most part of the southern island remain undeveloped as classified in the OZP (TPB, 2005) <ul style="list-style-type: none">- South Lantau coast (24.55 km²): Residential (0.57 km²); Village type development (0.86 km²); Government, institution or community (0.86 km²); Other specified uses (0.005 km²); Green Belt (4.82 km²); Coastal protection area (1.63 km²); Country park (15.7 km²)- Only about 9.35% (residential, village, government and others) of the total area of south Lantau coast have been developed. Rest of the area (22.255 km²) are reserved as green belt, coastal protection area and country park.

Appendix 8 Details of SWOT

f. Presence of SSSI (Lau, 2003) <ul style="list-style-type: none">- 8 locations of SSSI have been designated on the island since 1976 to 1999 (Table A8.1 and Figure A8.2)
g. Large green area provides relatively good air quality <ul style="list-style-type: none">- Country Parks on Lantau Island consists of 78.4 km² area (HKP, 1999c), which is about 54 % of Lantau Island's total area (144 km²). The presence of large green area may provide relatively fresh air.
h. With both traditional and modern cultures of HK <ul style="list-style-type: none">- Traditional cultures can be found in Tai O, Pui O, Cheung Sha, Tong Fok, Mui Wo, etc.- Modern cultures can be experienced in Tung Chung, Discovery Bay, etc.
i. Presence of purpose-built attractions <ul style="list-style-type: none">- HK Disneyland (2005) [August 1998 - The Walt Disney Company and the government of Hong Kong announced their intention to construct a themed entertainment resort in Hong Kong, the second in Asia; February 1999 - Penny's Bay, Lantau Island was announced as the future site of the Hong Kong Disneyland Resort; November 1999 – The HKSAR government and The Walt Disney Company announced the confirmation of Hong Kong Disneyland Project; 12th September 2005 – Official opening of Hong Kong Disneyland] (Hong Kong Disneyland, 2005)- The Big Buddha (Construction started in 1983; Operation started in 1993) (PLM, 2004)- Ngong Ping 360 (Proposed in 1998 / Operation started in 2006) (MTRC, 2006)- Wisdom Path (Construction started in 2003 / Operation started in 2005) (TC, 2006)
Others: many monasteries and temples (Refer to Appendix 5)
2. Capital (Infrastructures, facilities, accessibility, etc.)
a. Improved accessibility from urban areas to NE Lantau <ul style="list-style-type: none">- Transportation network between Lantau Island and urban areas have been improved in the recent decade. It facilitates visits to the island.- North Lantau Highway (Since May 1997)- Lantau Link (Since May 1997)- MTR (Tung Chung Line, Since June 1998; Airport Express, Since July 1998)- Buses from urban areas (HK, Kowloon, NT) to the island (Since May 1997), Taxi, private car- Ferry from HK island (Since 1955)
b. The Ngong Ping 360 Project with Cable Car <ul style="list-style-type: none">- The project has started operation in September 2006. The project has already attracted 1 million tourists in June 2007. It is commented by many stakeholders and tourists as one of the environmentally friendly transports.
Others: many walking trails; distance away from the urban <ul style="list-style-type: none">- Various trails on the island provide tourists with opportunities to experience the wilderness of HK (Refer to Table 3.3 in Chapter 3)- It takes about an hour for travelers to go to the island. This takes people away from the busy city.

3. Policies

- a. Conservation and educational purposes of the natural landscape and Country Parks
- Country Parks are designated for nature conservation, countryside recreation and outdoor education. The Country Parks Ordinance was enacted in 1976 to provide a legal framework for the designation, development and management of Country Parks and Special Areas. (AFCD, 2005)
 - "More than half of Lantau comes within the protected realm of Lantau South Country Park and Lantau North Country Park. The former was designated in 1978 as the largest country park in the territory. Occupying 56.4 square kilometers, it borders with Lantau North Country Park in the north and ends at South Lantau Road in the south. To the west lies Fan Lau and to the east sits the coastal town of Mui Wo. Within the boundaries of this park you find Chi Ma Wan Peninsula, Shui Hau Peninsula, the south face of Sunset Peak, Yi O, Fan Lau, Man Cheung Po, Ling Wui Shan, Shek Pik, Shap Long and Nam Shan." (AFCD, 2005)
 - "Lantau North Country Park was designated in 1978. Occupying a total area of 22 square kilometers, it encompasses Sunset Peak, Yi Tung Shan, Lin Fa Shan, northern slopes of Lantau Peak, Nei Lak Shan and the region north of Ngong Ping." (AFCD, 2005)
- b. Concentration of tourist attractions on Lantau Island
- "The long-term vision is to develop a tourism node on Lantau, comprising the Tung Chung cable car system, Giant Buddha, Hong Kong Disneyland and Sunny Bay tourism node." (HKPD, 2002b)
 - "Hong Kong would develop Yam O on Lantau into a new tourism node. This together with the Hong Kong Disneyland, Tung Chung Cable Car, the Big Buddha and Tai O Village would make Lantau Island a truly tourism island." (Hong Kong Government, 2001a)
 - "To strengthen North East Lantau as a major tourism hub, with Hong Kong Disneyland as the focus and compatible tourism and recreational uses in the vicinity. This includes developing Sunny Bay Tourism Node and a golf course cum resort at Tsing Chau Tsai East. The Hong Kong Disneyland Phase 1 together with possible expansion in the longer term is envisaged to be the anchor for further tourism development on Lantau" (HKPD, 2004)
 - "To enhance the visitor appeal of Ngong Ping based on its religious heritage and improved access by cable car" (HKPD, 2004)
 - "To maximize the potential of rural Lantau for sustainable recreational and visitor uses. This includes promoting sustainable recreational uses in South Lantau and Mui Wo, preserving the Tai O fishing village, and promoting compatible countryside recreation in and around the country parks" (HKPD, 2004)
 - "The Sunny Bay Reclamation, at the gateway to the North East Lantau tourism hub and near the Sunny Bay MTR Station, was recommended as a tourism node in the Northshore Lantau Development Feasibility Study. It is suitable for a leisure and entertainment node, particularly for youths, which may comprise such components as entertainment, dining, fashionable stores, performance venues, theme attractions and indoor leisure and sports facilities like indoor man made beach. The proposal could create synergy with Hong Kong Disneyland and other tourism

Appendix 8 Details of SWOT

proposals on Lantau.” (HKPD, 2004)
<div>c. Promotion of Lantau Island in the International markets by HKTB<ul style="list-style-type: none">- Promotion of Lantau and its attractions like HK Disneyland, The Big Buddha, Tai O, Ngong Ping 360 etc. in the website of HKTB are easily found (HKTB, 2005).- The new attractions are first foremost promoted, while the green and natural landscapes of Lantau are less promoted.- Visitors to Lantau Island come from both local and overseas markets. There are visitors from US (11%), Europe, Africa, Middle East (13%), Australia (12%), SE Asia (8%), Mainland China (7%), etc. in 2004 (HKTB, 2005).</div>
<div>d. Consultation with stakeholders about development projects on Lantau Island<ul style="list-style-type: none">- NP360: Stakeholders of the project have been consulted, including green groups and the local communities. The project value assessment has also been done (Mott Connell Ltd, 2005).- HK Disneyland: The suggestion on landuse changes of NE Lantau for tourism and recreational uses has been briefly presented to the Temporary Outlying Islands Council and Tsuen Wan Council in August 1999 (TC, 1999).- Wisdom Path: Consultations have been conducted with green groups about the natural and ecological conservation of the area.- Lantau Concept Plan: Public consultations have been conducted for several stages. (HKPD, 2004)</div>
<div>e. Individual Visit Scheme (of China) may increase tourists to Lantau Island<ul style="list-style-type: none">- Since 2003 July, the scheme has already extended to 49 Chinese mainland cities in 2007 (Chan, 2007)- 9% and 7% of tourists came from mainland China and visited Lantau Island in 2003 and 2004 respectively.</div>

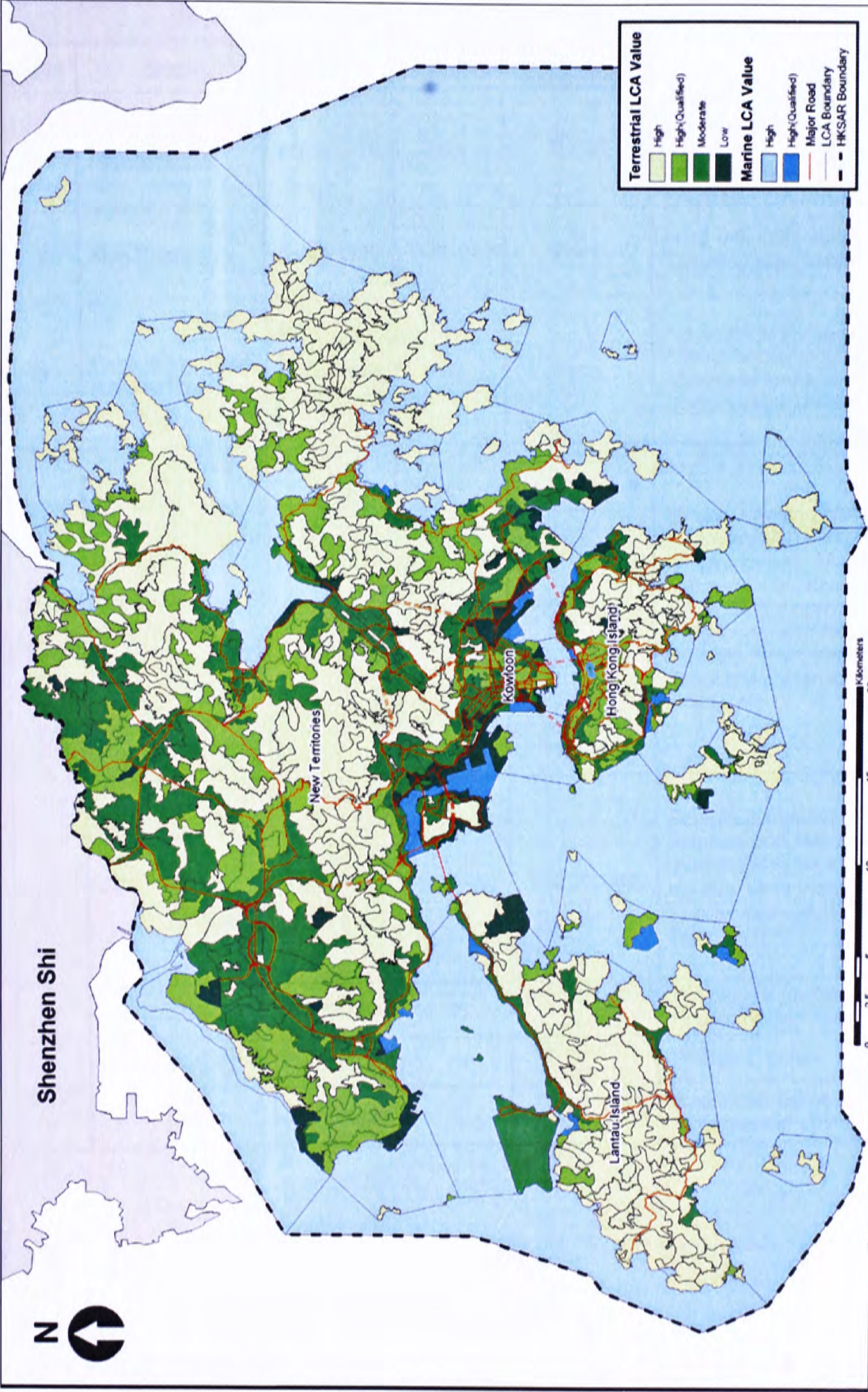


Figure A8.1 Landscape value map of Hong Kong

Source: HKPD, 2001c

Table A8.1 SSSI on Lantau Island

Code	Name	Date	Area (ha)	Reasons for designation	Features
1	Tai Tung Shan (Sunset Peak)	23/06/1976	331	Forest	Flora species: <i>Amentotaxus argotaenia</i> , <i>Manglietia fordiana</i> Oliv., <i>Michelia maudiae</i> Dunn, <i>Exbucklandia populnea</i> , <i>Fraxinus</i> , <i>Magonlia</i> Linn
2	Man Cheung Po	05/02/1980	29.2	Flora	Flora with funny species (e.g. <i>Ternstroemia microphylla</i> Merr.)
3	Fung Wong Shan (Lantau Peak)	05/02/1980	116	Flora	Flora with funny species (e.g. <i>Exbucklandia populnea</i> , <i>Manglietia fordiana</i> Oliv., <i>Magonlia</i> Linn, <i>Illicium</i> Linn., etc.)
4	Pok To Yan and Por Kai Shan	13/08/1994	76.4	Shrubs	Shrubs, rare and protected plants, Discovery of the first <i>Asarum hongkongense</i> , <i>Ailanthus fordii</i> ., <i>Enkianthus quinqueflorus</i> Lour., <i>Magnolia championi</i> , <i>Pavetta hongkongensis</i> ., <i>Nepenthes mirabilis</i> , <i>Rhododendron farrerae</i> , <i>Schoepfia chinensis</i> , <i>Acer tutcheri</i> Duthie, etc.)
5	San Tau Beach	19/10/1994	2.7	Sea-grasses	Sea-grass meadow includes Eelgrass and <i>Halophila ovalis</i> . It provides area for Invertebrate of the sea. More than 90% of <i>Papilioninae</i> can be found in San Tau Beach.
6	San Chau	04/05/1999	36	<i>Rhododendron</i> spp.	The biggest garden for <i>Rhododendron</i> spp.
7	Ngong Ping	04/05/1999	14	<i>Philautus romeri</i>	<i>Philautus romeri</i>
8	Tai Ho Stream	05/05/1999	5	Freshwater fishes	Freshwater fishes and <i>Plecoglossus altivelis</i>

Source: Lau, 2003

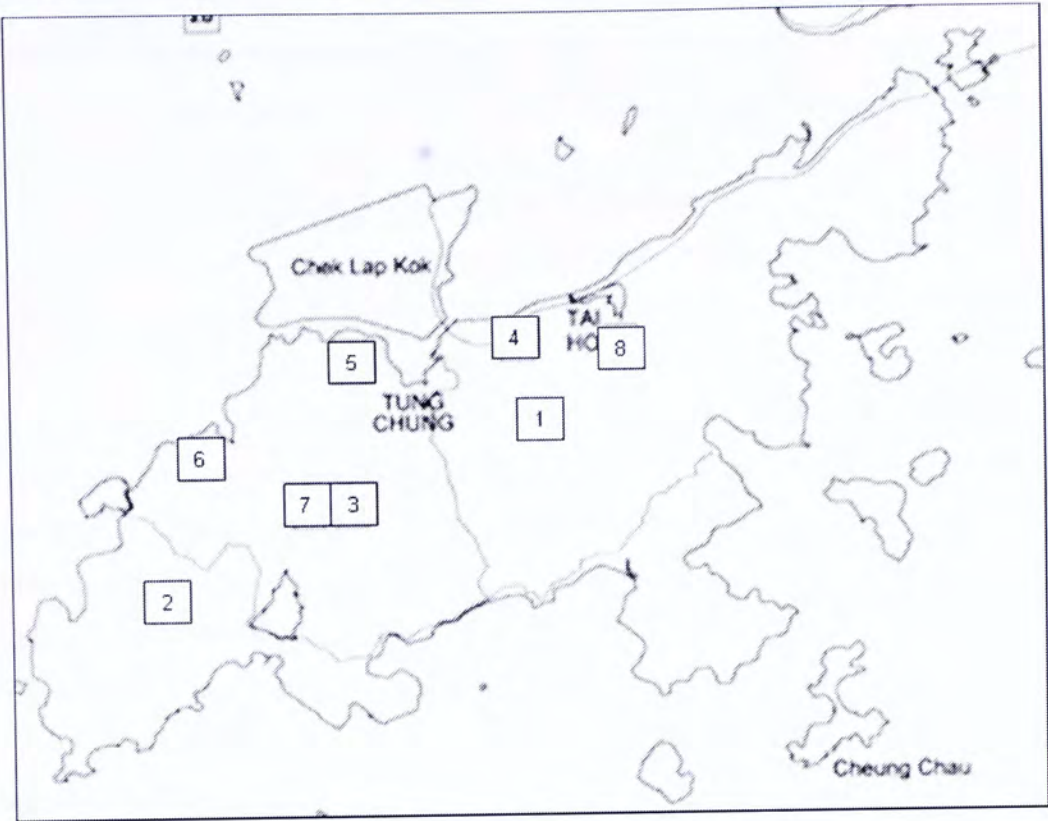


Figure A8.2 SSSI on Lantau Island
Source: HKPD, 2005b

WEAKNESSES	
1. Resources and Attractions	
a.	Reclamation in Northern Lantau have disturbed the marine habitats <ul style="list-style-type: none">- As shown in Table A8.2, some of the ecologically important sites particularly on Northern Lantau were already known to be threatened (GLA et al. 1998).
b.	Size limitation of the Hong Kong Disneyland <ul style="list-style-type: none">- The area of Disneyland was claimed to be stretching over 1.26 km². However, excluding the car park and hotel areas, there is only about 0.7 km² with the inclusion of area for supporting facilities and some area for future expansion. Therefore, it is estimated that there are only about 0.2 km² opened to the public (Huang, 2005).
c.	Lack of special festivals on Lantau Island <ul style="list-style-type: none">- There are limited kinds of small scale festivals and most of them are related to the Chinese religion with lack of promotion (Table A8.3)
Others: too many artificial attractions <ul style="list-style-type: none">- The highly promoted tourist attractions like Hong Kong Disneyland, The Big Buddha, Wisdom Path, The Asia World Expo and Sky City, are made artificially instead of natural landscapes and scenery. Some interviewees were not satisfied with that.	
2. Capital (Infrastructures, facilities, accessibility, etc.)	
a.	Relatively far away from the urban areas/ CBD of Hong Kong <ul style="list-style-type: none">- It takes about 30 minutes to 1 hour to go from Central to Mui Wo by ferry, another 40 minutes from Mui Wo to Tai O or Ngong Ping by bus.- It takes about 30 minutes to get from Hong Kong to Tung Chung by MTR, another 40 minutes from Tung Chung to Tai O, Ngong Ping, or Mui Wo by bus.- If a tourist goes from the north NT to Tai O or Ngong Ping, it may take about 2 hours for the whole journey.
b.	Relatively high transportation cost for local tourists <ul style="list-style-type: none">- MTR: \$23 (From Hong Kong to Tung Chung)- Ferry: \$11-\$32 (From Central to Mui Wo)- Lantau Bus: \$16-\$25 (From Tung Chung / Mui Wo to Ngong Ping)- It takes about \$100 as transport cost for an adult to travel for the whole journey.
c.	Limited kinds of transport traveling around the whole Lantau Island <ul style="list-style-type: none">- Franchised buses, Lantau taxis are public transport allowed traveling on the island- "In view of the limited road capacity, insufficient car parking facilities and the conservation/recreation objectives of South Lantau, the existing internal road network including Tung Chung Road, South Lantau Road/Tai O Road is operating under Closed Road Permit system. The roads are closed to all motor vehicles except those authorized by the Commissioner for Transport. Closed road permits are issued to full-time residents or property owners on Lantau

Appendix 8 Details of SWOT

<p>(excluding residents of Discovery Bay and Sea Ranch) and other applications on justification. There are about 3,200 valid permits including those granted to buses and Lantau taxis." (HKPD, 2001b)</p> <ul style="list-style-type: none">- "Tung Chung Road was also designated as a 'prohibited zone' in June 1991 to facilitate the construction of North Lantau New Town and the Airport. The only vehicles that are exempted from the prohibition are franchised buses, Lantau taxis and vehicles with prohibited zone permits. About 1,000 prohibited zone permits have been issued for transporting perishable goods, bulky and heavy materials or equipment or for undertaking urgent public works." (HKPD, 2001b)	
d. Far away from the emergency services (e.g. Hospitals)	<ul style="list-style-type: none">- Nearest Hospital: Queen Margaret Hospital in Kwai Chung / Yan Chai Hospital in Tsuen Wan- Clinic on the island: Mui Wo clinic, Tai O Jockey Club clinic, Tung Chung Health Center, HK Airport- Ambulance depot on the island: Penny's Bay, Tung Chung- Fire station on the island: Tung Chung, Chek Lap Kok, Penny's Bay, Discovery Bay, Mui Wo, Cheung Sha, Tai O (old and sub-division)
e. Insufficient mobile phone network coverage in the Country parks and Southern Lantau	<ul style="list-style-type: none">- Due to the difficulties of setting up many mobile phone network base stations, only some selected areas can have good network coverage. Some of the remote areas may have weak or even no coverage (Figure A8.3). Some other areas may receive the mainland's networks. Hence, visitors cannot ask for help conveniently in those remote areas.
f. Tourist services are mostly focused on some attractions only	<ul style="list-style-type: none">- (Hospitality and retail services) Visitor centers, hotels and lodging facilities, restaurants, retail shops are mostly found in some highly promoted attractions like Hong Kong Disneyland, etc. only.
g. Lack of information centers	<ul style="list-style-type: none">- There is no visitor information center found in the Lantau Country Park as well as tourist spots like The Big Buddha and Tai O.
Others: lack of small scale ancillary facilities, F&B/ restaurants	<ul style="list-style-type: none">- There is lack of ancillary facilities like toilets in some attractions and Country Park.
3. Policies	
a. Lack of comprehensive framework and principles for ST development on Lantau Island	<ul style="list-style-type: none">- Environmentally Sustainable Development Strategy for Hong Kong's Travel and Tourism Industry has been formulated in 1997. Yet, there is lack of implementation of the strategy leading to limited notification.- A general tourism planning framework has only been set for the whole HK in 2001
b. Lack of ST guidelines, indicators and policies to help the industry	<ul style="list-style-type: none">- There was the release of ESDS in 1998
Others: lack of tour guide training	

Table A8.2 Summary of ecologically important sites on Lantau Island

<u>Sites</u>	<u>Habitat types present</u>	<u>Large in size</u>	<u>Diversity of species or habitat</u>	<u>Rare species</u>	<u>Known to be threatened</u>	<u>Not protected by legislation</u>
South/ West Lantau						
Shui Hau Wan	mudflats, mangroves, sheltered bay	√	√	√		√
Tai Long Wan	sandy inlet			√		√
South Lantau waters	shallow marine/ estuarine habitats	√		√		√
Pui O	mangroves, wetland		√	√	√	√
Tai O	mangroves, wetlands	√	√	√	√	√
Shui Hau Wan	mangroves, mudflats, wetlands	√	√	√		√
Chi Ma Wan Peninsula	grassland, forest	√		√		
Yi O	mangroves, stream		√	√		√
Man Cheung Po	forests			√		
Tong Fuk	fung shui woodland		√	√		√
North Lantau						
Tung Chung	mangroves, wetlands, streams, inlets, forests	√	√	√	√	√
Pak Mong	wetlands, mangroves				√	√
San Tau	mangroves, seagrass, forest		√	√	√	√
Tai Ho Wan	mangroves, inlet, stream		√	√	√	√
San Chau	shrubland			√	√	√
Pok To Yan, Por Kai Shan	forests	√	√	√	√	√
North Lantau waters	shallow marine/ estuarine waters	√		√	√	√
Central Lantau						
Lantau Peak and Ngong Ping	forests, streams	√	√	√		√
Keung Shan	stream, forests			√		√
Sunset Peak	forests, streams	√	√	√		
Central Lantau Uplands	grassland	√		√		
East Lantau						
Mui Wo	wetlands, forests	√	√	√	√	
Luk Tei Tong	fung shui woodland		√		√	

Source: GLA et al., 1998

Table A8.3 Traditional festivals on Lantau Island

Date (Western Calendar)	Date (Chinese Calendar)	Festivals/ Activities	Venue
2006/04/20	23 rd March	Tung Chung Tin Hau's Birthday	Tin Hau Temple in Tung Chung
2006/10/09	18 th August	Tung Chung Hau Wong's Birthday	Hau Wong Temple
2006/05/05	8 th April	The Buddha's Birthday	Po Lin Monastery
2006/05/31	5 th May	King Kwan's Birthday	Tai O
2006/07/01	6 th June	Hau Wong's Birthday	Tai O
2006/07/14	19 th June	Kwun Yum's Birthday	Tai O
2006/08/16	21 st July	Hung Shing's Birthday	Tai O
2006/04/20	22 nd March	Tin Hau's Birthday	Pui O
2006/03/12	13 th February	Hung Shing's Birthday	Mui Wo
2006/06/08	13 th May	Man Mo's Birthday	Mui Wo



Figure A8.3 Mobile phone network coverage in Country Park of Lantau Island
Source: New World Mobility, 2005

OPPORTUNITIES	
1. <u>Resources and Attractions</u>	
a. Excellent possibilities for ecotourism in Southern Lantau	
b. Nature trails, long distance hiking trails and country trails for ecotourism (Refer to Table 3.3 in Chapter 3)	
c. Potential areas for the extension of Country Park	
- "The Lantau North (Extension) Country Park was promised in connection with the construction of the airport at Chek Lap Kok." (FoE, 2005)	
- It was stated that the extension will be granted in 2001. (1999 Policy Address)	
d. Religious buildings and historical monuments provide more cultural attractions (Appendix 5)	
e. Diversity of attractions on Lantau Island for various kinds of visitors (Refer to Table 3.3 in Chapter 3)	
Others: Development of spiritual and cultural tourism	
2. <u>Capital (Infrastructures, facilities, accessibility, etc.)</u>	
a. Construction of visitor centers can provide more visitor information and orientation	
- "Possible locations at Tung Chung Town Park, close to the town centre and Tung Chung cable car terminal, has been identified for a museum on Lantau. It could link up the heritage and eco-trails leading from Tung Chung to West Lantau." (HKPD, 2004)	
- "The Tung Chung Fort site is considered suitable for an eco-tour centre to introduce visitors to the rich ecological resources and eco-tourism spots on Lantau. It could be integrated with the eco-trail route linking up Tung Chung with West Lantau." (HKPD, 2004)	
b. Presence of Asia World Expo and Sky City	
- "AsiaWorld-Expo is a world class exhibition and event venue offering over 70,000 square metres of rentable space for exhibitions, conventions, concerts, sports and entertainment events. This state-of-the-art venue, opened in December 2005, is located at the centre of an extensive and efficient air, land and marine transport network connecting Hong Kong with China's Pearl River Delta and the world's business capitals." (AWEML, 2006)	
- With a budget of HK\$2.35 billion, Asia World-Expo is a public-private partnership involving funding from the Hong Kong SAR Government and a private sector consortium including Dragages Hong Kong Limited and Yu Ming Investments Limited, with the Airport Authority Hong Kong contributing the land. (AWEML, 2006)	
3. <u>Policies</u>	
a. Increasing investments on Lantau for tourism development	
- HK Disneyland: about \$14.1 billion (TC, 1999)	
- Ngong Ping 360: The project was built by MTRC and operated by Skyrail-ITM (HK). The total cost was about HK\$1 billion. (Anonymous, 2002)	
- Sunny Bay tourism node (planning), Tai O, Tung Chung (planning)	

Appendix 8 Details of SWOT

b. Development of Sunny Bay as a tourism node

- “The Sunny Bay Reclamation, at the gateway to the North East Lantau tourism hub and near the Sunny Bay MTR Station, was recommended as a tourism node in the North shore Lantau Development Feasibility Study. It is suitable for a leisure and entertainment node, particularly for youths, which may comprise such components as entertainment, dining, fashionable stores, performance venues, theme attractions and indoor leisure and sports facilities like indoor man made beach. The proposal could create synergy with Hong Kong Disneyland and other tourism proposals on Lantau.” (HKPD, 2004)

c. Preservation of Tai O culture

- Study on Revitalization of Tai O (1998-2000)
- “The Strategy seeks to rejuvenate the fishing village of Tai O with its unique heritage and character. The purpose is to preserve the cultural heritage and natural attributes, and at the same time to enhance its visitor appeal and local employment base. The Strategy seeks to sustain the community of Tai O and the cultural heritage, natural environment and local economy of the place.” (HKPD, 2002a)

d. A Vision for the Silvermine Bay Waterfront suggested by the local community on Lantau Island

- “The primary objective is to indicate how the area might be developed in order to not only attract but to retain visitors for as long as possible and induce them to return. This will create business and employment opportunities for the local population as well as boosting the appeal of views and beauty of the surrounding.” (Coates, 2004)
- “To improve this traditional visitor gateway to South Lantau and to revitalize the surrounding area, the Concept Plan has proposed to re-arrange and upgrade the uses around Mui Wo Ferry Pier. An entrance piazza, comprising a public open space, visitor information centre and other supporting facilities, and enhancement of the linkage to Silver Mine Bay Beach are proposed.” (HKPD, 2004)

e. New Nature Conservation Policy for Hong Kong (e.g. Tai Ho)

- “The new nature conservation policy is to regulate, protect and manage natural resources that are important for the conservation of biological diversity of Hong Kong in a sustainable manner, taking into account social and economic considerations, for the benefit and enjoyment of the present and future generation of the community.” (HKPD, 2005b)

THREATS
1. <u>Resources and Attractions</u>
a. Further development on Lantau Island will cause strain on ecosystem (Table A8.2) (GLA <i>et al.</i> , 1998)
Others: Competition from NENT & SENT
2. <u>Capital (Infrastructure, facilities, accessibility, etc.)</u>
a. Insufficient waste treatment and recycling facilities on Lantau Island
- North Lantau Transfer Station (Waste facilities) (operated since 1998)
- Outlying Island transfer facilities (operated since 1998)
- Ngong Ping Sewage Treatment Plant (operated since 2005)
- According to the records, the amount of wastes transferred from the North Lantau Transfer Station in 2006 (152 tones/ per day) has an increase of 2.7% compared with 2005. (HKEPD, 2007)
3. <u>Policies</u>
a. Lack of realistic and long-term ST development planning for Lantau Island
- Commented by stakeholders
b. Lack of regulations for the implementation of ST practices on Lantau Island
- Commented by stakeholders
Others: lack of villagers participation and collaboration (Commented by stakeholders)

Appendix 9a Questionnaire for tourists in Ngong Ping (English version)

6. Where have you visited in Ngong Ping in this journey? Please score the level of satisfaction for your visit to the attractions.

Very Dissatisfied	Dissatisfied	Average	Satisfied	Very Satisfied
1	2	3	4	5

- a. The Big Buddha ()
- b. The Po Lin Monastery ()
- c. Wisdom Path ()
- d. Ngong Ping 360 (The Cable Car Project) ()
- e. Others: ()

7. Which attraction do you like most?

- a. The Big Buddha
- b. The Po Lin Monastery
- c. Wisdom Path
- d. Ngong Ping 360 (The Cable Car Project)
- e. Others:

8. What do you like about the attraction? (You may choose more than 1 options)

- a. Outstanding scenery
- b. Fun and entertaining
- c. Conservation of the local culture
- d. Restful and relaxing
- e. People are friendly
- f. Unique
- g. Others:

9. What do you dislike about the attraction/ Ngong Ping? (You may choose more than 1 options)

- a. Lack of restaurants or shops for F&B
- b. Lack of toilets
- c. Lack of visitor information and guidance
- d. Lack of seats/ areas for rest
- e. Far away from the urban area
- f. Too many artificial attractions
- g. Limited kinds of transports
- h. High transport cost
- i. High entrance fee
- j. Others: (No, Don't know, have no idea)

10. Please score the level of satisfaction for your visit to Ngong Ping.

Very Dissatisfied	Dissatisfied	Average	Satisfied	Very Satisfied
1	2	3	4	5

Appendix 9a Questionnaire for tourists in Ngong Ping (English version)

11. Do you think that the existing concentration of various tourist attractions in Ngong Ping is beneficial (to the long term tourism development in the area)? Why?
- a. YES
 - i. More convenient
 - ii. Save time
 - iii. Can attract more tourists
 - iv. Others: _____
 - b. NO
 - i. Too many people
 - ii. Environmental destructions
 - iii. Diversion of attractions allow tourists to visit various places
 - iv. Others: _____
 - c. Others: _____ (Don't know, have no idea)
12. Do you think that the existing tourist attractions in Ngong Ping are already enough?
- a. YES
 - b. NO
 - c. Others: _____ (Don't know, maybe, have no idea)
13. Will you come to visit Ngong Ping again in the future (next 5 years)?
- a. YES
 - b. NO
 - c. Others: _____ (Don't know, maybe, have no idea)

Concept of Sustainable Tourism

14. Do you know what "Sustainable Tourism" is?
- a. YES (To Qs. 16)
 - b. NO (To Qs. 17)
15. What do you think "Sustainable Tourism" is?
- _____
- _____
16. Do you think that the attractions in Ngong Ping have adopted some environmental protection measures? What have they done?
- a. YES (To Qs. 18)
 - i. Conservation of the natural habitants / greening
 - ii. Make use of the renewable resources
 - iii. Provision of recycling bins with garbage classification
 - iv. Others: _____
 - b. NO (To Qs. 19)
 - c. Others: _____ (Don't know, maybe, have no idea)

Appendix 9a Questionnaire for tourists in Ngong Ping (English version)

17. Do you think that the measures they have adopted are enough? (How should it be improved?)
- a. YES
 - b. NO _____
 - c. Others: _____ (Don't know, maybe, have no idea)
18. Do you think that it is necessary to have environmental protection measures? (In which way?)
- a. YES _____
 - b. NO
 - c. Others: _____ (Don't know, maybe, have no idea)
19. Do you think that the attractions have contributed to the conservation of the local culture? In which way?
- a. YES _____
 - b. NO
 - c. Others: _____ (Don't know, maybe, have no idea)
20. Do you think that the attractions can provide a long term economic benefits for Hong Kong? Why?
- a. YES _____
 - b. NO _____
 - c. Others: _____ (Don't know, maybe, have no idea)

General information

21. Gender: Male Female
22. Nationality: _____
23. Age Group:
- a. 18 – 25
 - b. 26 – 35
 - c. 36 – 45
 - d. 46 – 55
 - e. 56 – 65
 - f. 66 or above
24. Education level:
- a. Below High School
 - b. High School
 - c. Some college
 - d. College degree or above
25. Which of the following categories best describes your household's yearly income?
- a. US\$ 20,000 or below
 - b. US\$ 20,001 - US\$ 40,000
 - c. US\$ 40,001 - US\$ 60,000
 - d. US\$ 60,001 - US\$ 80,000
 - e. US\$ 80,001 - US\$ 100,000
 - f. US\$ 100,001 or above

APPENDIX 9b Questionnaire for tourists in Ngong Ping (Chinese version)

昂坪遊客問卷調查

我們是香港中文大學的研究員，正在進行一項關於昂坪的可持續旅遊 (Sustainable Tourism) 發展的研究，希望能收集遊客在昂坪旅遊的意見，閣下的寶貴意見將對香港的旅遊發展作出很大貢獻。此問卷約需幾分鐘完成，所有資料只會作研究用途，並且會絕對保密。謝謝！

1. 你認為去昂坪的交通是否方便？
 - a. 方便
 - b. 不方便
 - c. 一般
2. 你是通過以下哪種方法來昂坪？
 - a. 個人安排
 - b. 旅行社
 - c. 非謀利組織
 - d. 其他：_____
3. 你到昂坪的目的是什麼？
 - a. 觀光
 - b. 宗教目的
 - c. 行山 / 遠足
 - d. 其他：_____
4. 你在昂坪逗留了多久？
 - a. 1 – 2 小時
 - b. 3 – 4 小時
 - c. 5 – 6 小時
 - d. 多於 6 小時
5. 有什麼東西吸引你到昂坪？（可選多於一個）
 - a. 景色優美
 - b. 宗教氣氛濃厚 / 有各大小寺廟
 - c. 旅遊景點集中地
 - d. 天壇大佛
 - e. 昂坪 360（昂坪纜車）
 - f. 有遠足徑 / 家樂徑
 - g. 其他：_____

6. 在這次旅程中，你會到昂坪哪兒遊覽？請為你所遊覽的景點的滿意程度作評分。

非常不滿意	不滿意	一般	滿意	非常滿意
1	2	3	4	5

- a. 天壇大佛 ()
- b. 寶蓮寺 ()
- c. 心經簡林 ()
- d. 昂坪 360 (昂坪纜車) ()
- e. 其他：_____ ()
7. 你最喜歡昂坪的哪一個景點？
- a. 天壇大佛
- b. 寶蓮寺
- c. 心經簡林
- d. 昂坪 360 (昂坪纜車)
- e. 其他：_____
8. 你喜歡以上景點的什麼地方？（可選擇多於一個答案）
- a. 景色優美
- b. 有趣
- c. 能保存本地文化
- d. 令人感到悠閒舒適
- e. 人們友善
- f. 獨特
- g. 其他：_____
9. 你不喜歡景點 / 昂坪的什麼地方？（可選擇多於一個答案）
- a. 餐廳 / 小賣店不足
- b. 洗手間不足
- c. 旅客資料及指引不足
- d. 坐位 / 休憩地方不足
- e. 遠離市區
- f. 太多人工景點
- g. 交通不方便
- h. 交通費昂貴
- i. 入場費 / 門券昂貴
- j. 其他：_____ (沒有 / 不知道 / 無意見)

10. 請為你這次「昂坪之旅」的滿意程度作評分。

非常不滿意	不滿意	一般	滿意	非常滿意
1	2	3	4	5

11. 你是否贊成現時旅遊景點集中在昂坪？為什麼？

- a. 贊成
 - i. 方便遊覽
 - ii. 省時
 - iii. 可吸引更多遊客
 - iv. 其他：_____
- b. 不贊成
 - i. 太多人
 - ii. 會對環境做成破壞
 - iii. 景點分散可吸引遊客到其他地方遊覽
 - iv. 其他：_____
- c. 其他：_____ (不知道 / 無意見)

12. 你認為現時在昂坪的旅遊景點是否足夠？

- a. 足夠
- b. 不足夠
- c. 其他：_____ (不知道 / 無意見)

13. 在未來（五年），你會否再次遊覽昂坪？

- a. 會
- b. 不會
- c. 其他：_____ (不知道 / 或者 / 無意見)

可持續旅遊的概念

14. 你知道什麼是「可持續旅遊」嗎？

- a. 知道（往問題 16）
- b. 不知道（往問題 17）

15. 你認為什麼是「可持續旅遊」？

16. 你認為昂坪的景點有沒有做一些保護環境的措施？他們做了什麼？

- a. 有（往問題 18）
 - i. 保存自然生態，包括植物及動物 / 綠化
 - ii. 使用可再用資源
 - iii. 提供廢物分類回收箱
 - iv. 其他：_____
- b. 沒有（往問題 19）
- c. 其他：_____ (不知道 / 或者 / 無意見)

17. 你認為他們做的措施是否足夠？有哪方面需要改善？

- a. 足夠
- b. 不足夠 _____ (不知道 / 無意見)
- c. 其他：_____ (不知道 / 或者 / 無意見)

18. 你認為保護環境的措施是否必要？在哪一方面？
- a. 是 _____(不知道 / 無意見)
 - b. 不是
 - c. 其他： _____(不知道 / 或者 / 無意見)
19. 你認為在發展昂坪的景點時有沒有保存本地文化？在哪一方面？
- a. 有 _____
 - b. 沒有
 - c. 其他： _____(不知道 / 或者 / 無意見)
20. 你認為昂坪的景點能否為香港帶來長遠的經濟利益？為什麼？
- a. 能 _____
 - b. 不能 _____
 - c. 其他： _____(不知道 / 或者 / 無意見)

一般資料

21. 性別：男 女
22. 國籍： _____
23. 年齡組別：
- a. 18 – 25 歲
 - b. 26 – 35 歲
 - c. 36 – 45 歲
 - d. 46 – 55 歲
 - e. 56 – 65 歲
 - f. 66 歲或以上
24. 教育程度：
- a. 小學或以下
 - b. 初中
 - c. 高中
 - d. 專上學院 / 大學或以上
25. 你的家庭每月總收入約有多少？
- a. 港幣 \$ 20,000 或以下
 - b. 港幣 \$ 20,001 - 港幣 \$ 40,000
 - c. 港幣 \$ 40,001 - 港幣\$ 60,000
 - d. 港幣 \$ 60,001 - 港幣\$ 80,000
 - e. 港幣 \$ 80,001 - 港幣\$ 100,000
 - f. 港幣 \$ 100,001 或以上

APPENDIX 10a Questionnaire for local community in Ngong Ping

Structured interview with local community in Ngong Ping

We are researchers of The Chinese University of Hong Kong. This is an interview about sustainable tourism development in Ngong Ping. We would like to investigate the perception of local community on the development of tourism cluster in Ngong Ping. Your opinions are highly appreciated and vital for the tourism development in the region. The interview will take a few minutes to complete and all information will be kept confidentially. Thank you.

1. Do you support the existing concentration of tourist attractions/ development of tourism cluster in Ngong Ping? Why?

Yes/ No

Reasons: _____

2. Have you noticed any changes brought to the community before and after the addition of tourist attractions in Ngong Ping? If Yes, what are the changes?

Yes/ No

Changes: _____

3. The following are some statements about environmental, socio-cultural and economic impacts which may have resulted from the tourism cluster development. Please record your level of agreement with each of the statements.

(1: Strongly Disagree, 2: Disagree, 3: Neutral, 4: Agree, 5: Strongly Agree)

(I) Environmental impacts:	Strongly Disagree			Strongly Agree		
a) Conservation of natural habitats/ assets in Ngong Ping	1	2	3	4	5	
b) Make use of renewable resource in their operations	1	2	3	4	5	
c) Efficient use of resource in their operations	1	2	3	4	5	
d) Sufficient provision of waste and recycling facilities	1	2	3	4	5	
e) Improvement of the appearance of Ngong Ping	1	2	3	4	5	
f) Disturbance to the habitats of plants and animals in Ngong Ping	1	2	3	4	5	
g) Loss in variety of plants and animals	1	2	3	4	5	
h) More noise is produced	1	2	3	4	5	
i) Increase of artificial attractions and facilities at the cost of green area	1	2	3	4	5	
j) Increase of litter	1	2	3	4	5	
k) Air pollution becomes more serious	1	2	3	4	5	

(II) Socio-cultural impacts:

	Strongly Disagree			Strongly Agree	
a) Improvement of transport networks between Ngong Ping and other parts of Lantau Island	1	2	3	4	5
b) Increased facilities (e.g. restaurants)	1	2	3	4	5
c) Conservation of local culture	1	2	3	4	5
d) More congested	1	2	3	4	5
e) Loss of local lifestyle and traditional habits	1	2	3	4	5
f) Development in the interest of visitors as opposed to locals	1	2	3	4	5
g) Disturbance to the unique spiritual characteristics of Ngong Ping	1	2	3	4	5
h) Further tourism development in Ngong Ping is discouraged	1	2	3	4	5

(III) Economic impacts:

	Strongly Disagree			Strongly Agree	
a) Enhance the long term economic benefits to Ngong Ping	1	2	3	4	5
b) Enhance the long term economic benefits to Hong Kong/ Lantau Island	1	2	3	4	5
c) Provision of business opportunities for locals	1	2	3	4	5
d) Economic benefits to tourism operators rather than the locals	1	2	3	4	5
e) Increase in the cost of living in Ngong Ping	1	2	3	4	5

4. What do you think is the greatest *contribution* of the formation of tourism cluster to *Ngong Ping*? Why?

Reasons:

5. What do you think is the greatest *contribution* of the formation of tourism cluster to *Lantau Island/ Hong Kong*? Why?

Reasons:

6. What do you think is the biggest *damage* the cluster caused to *Ngong Ping*? Why?

Reasons:

7. What do you think is the biggest *damage* the cluster caused to *Hong Kong/ Lantau Island*? Why?

Reasons:

8. What do you think the tourism cluster should do/ improve to enhance

(a) environmental conservation;

(b) socio-cultural conservation;

(c) economic sustainability?

9. What is the most important factor for the sustainable tourism development in Ngong Ping/ Lantau Island? (Can choose more than 1 option)

- a) Government support
- b) Promoted by tourism operators
- c) Promoted by the HKTB
- d) Promoted by local community
- e) Education of the public on the importance of sustainable tourism development
- f) Cooperation between the tourism operators of the major attractions in Ngong Ping
- g) Collaboration among the government, tourism operators and local community
- h) Others _____

Personal information (It will only be used in this research and kept confidential):

10. Gender: Male Female

11. Age group

- a) 18 – 25
- b) 26 – 35
- c) 36 – 45
- d) 46 – 55
- e) 56 – 65
- f) 66 or above

12. How long have you been living/ working in Ngong Ping? _____

13. Education level

- a) Below High School
- b) High School
- c) Some college
- d) College degree or above

14. Occupation/ Are you involved in any type of business in Ngong Ping? _____

This is the end of the questionnaire. Thank you for your time and participation!

APPENDIX 10b Questionnaire for local community in Ngong Ping (Chinese version)

昂坪旅遊發展之昂坪社區問卷調查

我們是香港中文大學的研究員，正在進行一項關於昂坪的可持續旅遊 (Sustainable Tourism) 發展的研究，希望能收集昂坪社區對昂坪旅遊發展的意見，閣下的寶貴意見將對香港的旅遊發展作出很大貢獻。此問卷約需 15-20 分鐘完成，所有資料只會作研究用途，並且會絕對保密。謝謝！

1. 你是否支持 / 贊成現時在昂坪發展的旅遊區 / 旅遊景點集中在昂坪？為什麼？
- 支持 / 不支持
- 原因： _____
2. 你是否察覺在昂坪加入更多景點後，跟未加入前相比，為昂坪社區帶來了一些改變？若有，那是什麼改變？
- 有 / 沒有
- 原因： _____
3. 以下是一些關於昂坪旅遊區發展時，可能已帶來對環境、社會文化及經濟方面的一些影響。請填寫你對以下每一個描述的同意程度。
- (1: 十分不同意, 2: 不同意, 3: 一般, 4: 同意, 5: 十分同意, O: 其他 / 不知道 / 無意見)

(I) 對環境的影響:

	十分 不同意					十分 同意				
a) 能保存昂坪的天然資源	1	2	3	4	5					
b) 使用可再用資源	1	2	3	4	5					
c) 有效地使用資源	1	2	3	4	5					
d) 提供足夠的廢物回收 / 處理設施	1	2	3	4	5					
e) 改善昂坪景觀	1	2	3	4	5					
f) 為昂坪的動植物帶來騷擾	1	2	3	4	5					
g) 使動植物的種類減少	1	2	3	4	5					
h) 噪音增多	1	2	3	4	5					
i) 增加了人造景點及設施，卻使綠色地帶減少	1	2	3	4	5					
j) 垃圾增多	1	2	3	4	5					
k) 空氣污染變得更嚴重	1	2	3	4	5					

(II) 對社會文化的影響:

	十分 不同意					十分 同意				
a) 改善了來往昂坪及大嶼山其他地區的交通	1	2	3	4	5					
b) 設施增多(如餐廳)	1	2	3	4	5					
c) 能保存本地文化	1	2	3	4	5					
d) 多了遊人、變得擠迫	1	2	3	4	5					
e) 失去了本社區的生活方式及傳統	1	2	3	4	5					
f) 爲了遊客多於爲本社區而發展	1	2	3	4	5					
g) 使昂坪獨特的宗教環境受騷擾	1	2	3	4	5					
h) 本社區不再鼓勵更多的旅遊發展	1	2	3	4	5					

(III) 對經濟的影響:

	十分 不同意					十分 同意				
a) 對昂坪社區有長遠經濟利益	1	2	3	4	5					
b) 對香港 / 大嶼山有長遠經濟利益	1	2	3	4	5					
c) 爲本社區帶來更多生意	1	2	3	4	5					
d) 爲旅遊從業員多於爲本社區帶來經濟利益	1	2	3	4	5					
e) 使在昂坪的生活費增加	1	2	3	4	5					

4. 你認為集中旅遊景點 / 昂坪旅遊區對昂坪最大的貢獻是什麼？爲什麼？
- 原因： _____
5. 你認為集中旅遊景點 / 昂坪旅遊區對大嶼山 / 香港最大的貢獻是什麼？爲什麼？
- 原因： _____
6. 你認為集中旅遊景點 / 昂坪旅遊區對昂坪最大的破壞是什麼？爲什麼？
- 原因： _____
7. 你認為集中旅遊景點 / 昂坪旅遊區對大嶼山 / 香港最大的破壞是什麼？爲什麼？
- 原因： _____

8. 你認為昂坪旅遊區要作出什麼改善才能有助

(a) 保護環境； _____

(b) 保存社會文化； _____

(c) 獲得長遠經濟利益？ _____

9. 你認為有什麼重要因素能有助昂坪 / 大嶼山的可持續發展？(可選擇多於一個答案)

a) 政府支持

b) 由旅遊業界推行

c) 由旅遊發展局推行

d) 由當地社區推行

e) 教育大眾有關可持續旅遊的重要性

f) 在昂坪旅遊區內的主要景點共同合作

g) 政府、旅遊業界及當地社區的相互合作

h) 其他： _____

個人資料 (只作研究用途，並將絕對保密):

10. 性別：男 女

11. 年齡組別：

a) 18 – 25

b) 26 – 35

c) 36 – 45

d) 46 – 55

e) 56 – 65

f) 66 或以上

12. 你在昂坪住 / 工作了多久？ _____

13. 教育程度

a) 小學或以下

b) 初中

c) 高中

d) 專上學院 / 大學或以上

14. 職業 / 你有否參與任何在昂坪之商業 / 旅遊活動？ _____

此問卷調查已完成，謝謝你的參與！

APPENDIX 11 Basic site-specific information required

(A) Site-specific aspects:

- (i) The various laws and regulations and plans that may be applicable to the specific site, including overviews of:
 - a. Existing laws at local, sub-national and national levels;
 - b. Existing uses, customs and traditions;
 - c. Relevant regional and international conventions or agreements and their status, and cross-boundary agreements or memoranda of understanding (MoUs);
- (ii) Identification of various stakeholders involved in or potentially affected by the proposed project - including stakeholders in governmental, non-governmental, and private sectors (particularly those from the tourism sector), and indigenous and local communities - along with details concerning their participation in and/or consultation on the proposed project during its design, planning, construction and operation;

(B) Ecological aspects:

- (i) Detailed indication of the protected and biodiversity significant areas;
- (ii) Specifications on the ecosystems, habitats, species;
- (iii) Quantitative and qualitative information on the loss of habitats and species (main reasons, trends);
- (iv) Indexing of species;
- (v) Identified threats;
- (vi) Existing zones, ecological zones and existing tourism zones within the ecological zones;
- (vii) Ecologically sensitive zones and zones where ecological disasters have or will most likely take place;

(C) Development aspects:

- (i) Summary of the proposed project, why and by whom it is proposed, estimated outcomes and possible impacts (including impacts on the surrounding areas and transboundary impacts), and quantitative and qualitative data on these aspects;
- (ii) Description of the stages of development and the various structures and stakeholders that may be involved at each stage;
- (iii) Description of current land-uses, infrastructures, tourism facilities and services and their interaction with proposed operations.

Data Source: SCBD, 2004

CUHK Libraries



004461286